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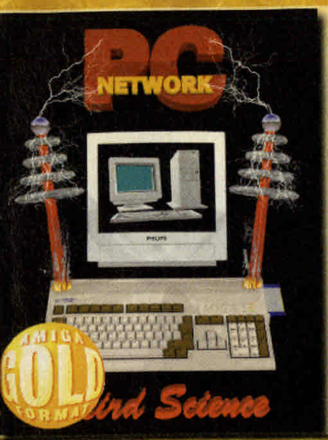
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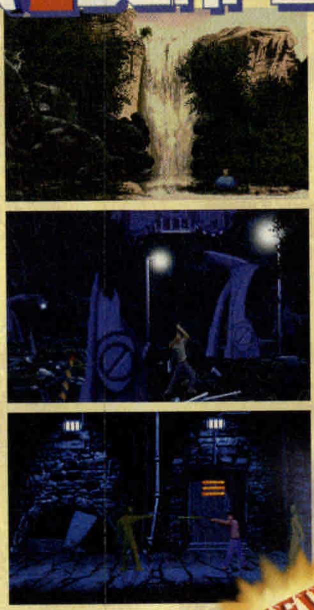
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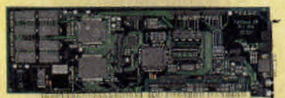
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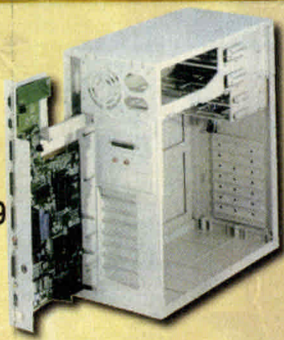
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Month **In View**

This issue is brought to you by the number 32 and the phrase "Eat plasma you sub-human scum" claims **Nick Veitch**.

Thirty-two. That is how many pages we have of games-related greatness we have for you this month. That's an awful lot of games for a "dead" platform. I expect we're reviewing more games this month than many Sega Saturn or N64 magazines.

But it's the quality that counts. And that's the even more surprising thing – many of the games covered are simply excellent. Titles like *Doom*, *Myst*, and a preview of *Quake*. Things are certainly looking up.

Ben has had a delve into the ether to conjure up a list of games in development, all of which will hopefully be released this year, and there are some pretty exciting projects underway.

Andy has spent most of this month making funny noises, which he claims were merely the product of "rotating the tower". He was also heard to mumble things about red pages, so I guess he must have really enjoyed clickBOOM's port of the classic adventure game *Myst*.

Even I have been caught playing games once or twice during the making of the issue, but not just any old game. I was testing all the different *Doom* ports to see which offered the best speed and the best features. There are updates almost daily, but I hope that my findings will be useful. Obviously we have all the latest software on the CD, so those of you buying the CD version will be able to try them out for yourselves.

Of course, all play and no work makes the magazine run late, so we've also reviewed some super-fast modems and a great new C-compiler so check them out. But now, if you'll excuse me, I'm sure I heard a cacodaemon hiding just around the corner...



Nick Veitch
Editor



STILL GAMING ON PAGE 14
We take a look forward to the exciting games currently in production all over the world – the top games of '98 may well be here.



DOOM LOOMS ON PAGE 32
It is Doom, but on the Amiga! I have personally decided to give you my own guide to the various Doom ports – check out the best ones here!



MYST PAGE 35
The real review of this top game. You'd be mad if you myst it.



THEY'RE SMALL AND FAST PAGE 64
It's all flashing lights and funny noises on page 64, but these are the fastest modems that technology has to offer.

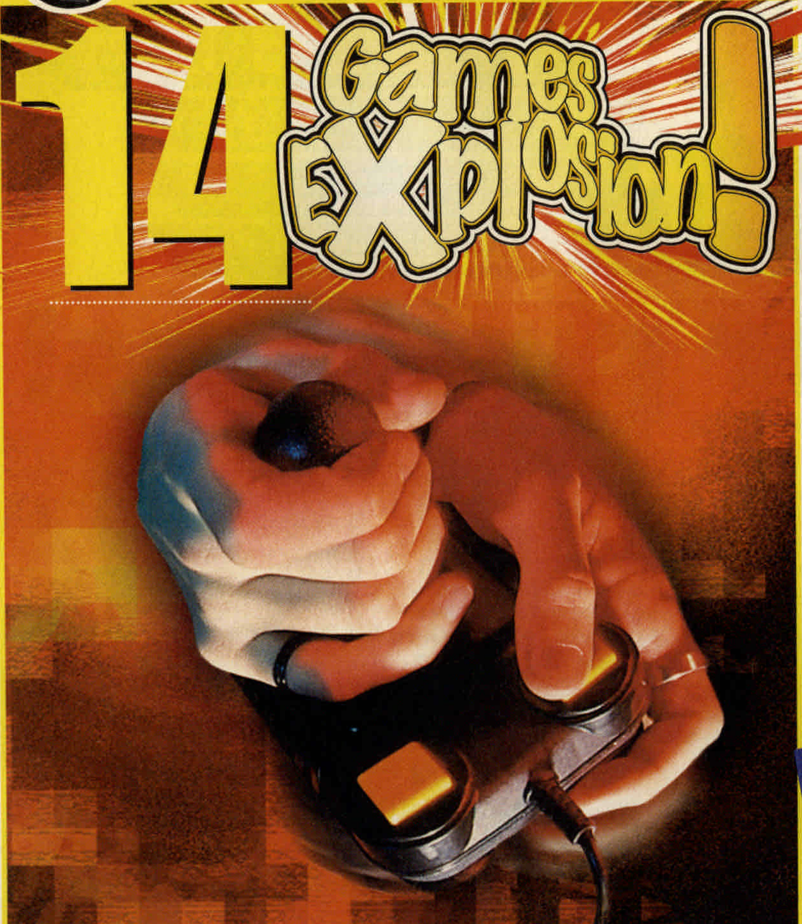


INTERVIEW PAGE 68
Thinking about setting up a business? We meet a man who has...

AMIGA FORMAT Contents

ISSUE 108 MARCH 1998

COVER STORY



1998 looks set to be a fantastic year for games. We bring you all the latest news, sneak previews, definitive reviews and exclusive interviews that you'll find anywhere. Hold onto your joysticks and get ready for *AF*'s Games Explosion!





Doom needs no introduction (above, left). Test your footy skills in *CM2* (below left).





Stunning graphics, tricky puzzles and gentle adventuring in the long-awaited *Myst* (above).



The two people who created one of the best Amiga games of 1997.

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AMIGA News FORMAT

WHAT'S UP?

Processor progress!

January has been a very interesting month for new statements about processors. People on the net will have swiftly learned of Joe Torre's little missive that got leaked to a wider world towards the end of the month, and which is printed here in full.

Motorola were first off the blocks with the (leaked) news that the 68060 wasn't at a dead end. The news has come from a source inside Motorola that the schematics for the '060 have been reworked for Motorola's .42 micron fabrication plant since they don't have much use for their .50 micron fabrication plant any longer.

This means that the bog standard 50MHz unit will be replaced with a much smaller one rated at 75MHz sometime in April, thanks to the increased efficiency of the .42µ fab.

Of course, if Motorola decide to take the '060 one step further and put it on their .25 micron fabrication plant, the speed of the chip could dramatically increase up to 266MHz! Taking things one step further, it would theoretically be possible to move the fab to the .18 micron plant giving a possible speed of 508MHz.

Of course, making the chip this small raises all sorts of other problems, which is part of the reason that the PowerPC is a RISC chip and therefore simpler in construction.

The problems would include a much higher rejection rate because of the difficulty of consistently constructing chips on this scale, quantum interference problems with paths of this size, the heat generated by the chip would be enormous for its physical size, shielding problems caused by this amount of electronics packed into such a small space and so on.

However, the prospect of faster 68060s is one that is very attractive. There would not be such a huge need for the OS to migrate to a different processor platform as most software would instantly work properly and people would have a clear upgrade path.

This is all just conjecture at this point and until Motorola actually releases the 75MHz 68060 (which you'll probably be able to safely overclock to somewhere near 90MHz anyway), there is no point in speculating on the possibilities of '060s built on Motorola's even finer fabs.

As for Amiga Inc.'s statement about their support for the PowerPC platform, apart from the fact that AmigaOS 3.5 will be written solely for the 68k series, it points to the fact that although Amiga Inc. have given their approval for the direction that phase 5 are taking the Amiga, they aren't willing to commit to directing that effort themselves.

Amiga Format really hopes that this isn't actually the case, but thinks that Amiga Inc. should lay down some guidelines for future development.

Q. Which CPU is more in the Amiga's future, 68k or PPC?
A. Both of them. Amiga has the 68k for legacy compatibility, the PPC for speed. The flexibility of the Amiga architecture has allowed it to gain a PPC chip(s) for computationally intensive tasks like rendering, (de) compression, (de) encryption, etc. The 68k provides 100% software compatibility, while the PPC provides the horsepower. As more of us upgrade to 68k+PPC we will have more and more software for our Amigas that harness the capabilities of PPC.

Q. Will a PPC accelerator be required to run Workbench 3.5?
A. Definitely not. The OS upgrade is for existing machines as well as future ones. We wish to maximise the value and appeal of WB3.5, so all users will upgrade upon release.

Q. Since a native PPC version of WB3.5 would be faster than a 68k version, why is it being written for 68k only?
A. To support the existing Amiga community. Whatever CPU AmigaDos was ported to, it would run faster if the CPU was faster. The time it takes to market is an important consideration. The time it takes to add an accelerator board is under 20 minutes, but porting the OS to PPC would take a year plus. The WB3.5 upgrade is for the hundreds of thousands of 680x0 machines in use today, with or without PPC co-processors. More Amiga users benefit from a 68k upgrade sooner, than a PPC upgrade later, to hardware they don't own.

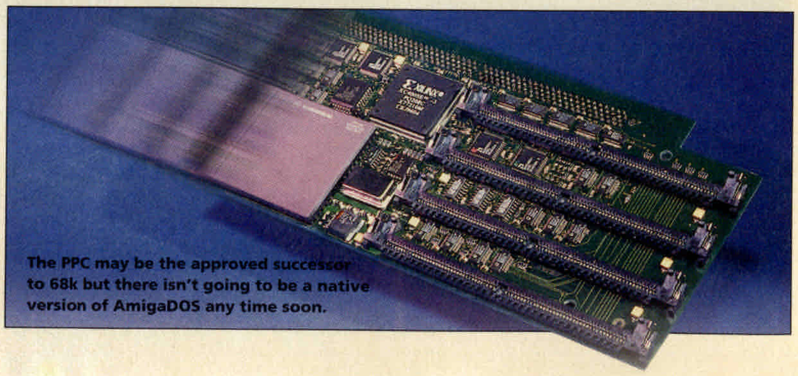
Q. Will there be a PPC-only version of AmigaDos?
A. Third party AmigaDos licenses are free to port to Alpha, PPC, MIPS, etc. These CPUs may be ideal for embedded (non-Amiga) applications that AmigaDos excels at. While these ports will undoubtedly be fast, especially compared to the bloated OSs that usually run on such hardware. Although they can't be considered to be Amiga compatible unless they provide some sort of chipset and 68k emulation.

Q. What about the Motorola ColdFire family as a CPU?
A. The ColdFire is less than 30% code compatible with 68k, and low in price, high in performance. The ColdFire has a reduced set of instructions which make it very fast, but it lacks many of the bitfield operations that are critical to AmigaDos. Using ColdFire would require a complete rewrite of AmigaDos, and would be incompatible with the existing commercial programs and all of the great Aminet archive.

Q. Will Amiga Inc. be making new Amigas?
A. No, Amiga, Inc. will not be making new machines. New machines will come from companies who have a license from Amiga International. Petro has been very successful licensing the Amiga technology. Check the Amiga International web page at www.amiga.de for the long list of licensees. Look to those companies for the new Amiga models. These companies brought refinements like RTG, AHI, PPC, Wide SCSI, and even PCI to the Amiga! These companies need your feedback as to what kind of features you'd prefer in a new Amiga model. They will only produce the kinds of Amigas that you want to buy.

Joe Torre's leaked press release about the future of the Amiga processor.

> *There would not be such a huge need for the OS to migrate to a different processor platform...*



The PPC may be the approved successor to 68k but there isn't going to be a native version of AmigaDOS any time soon.

phase 5 news

Phase 5 have been quiet since the Cologne show, but in an exclusive interview, boss Wolf Dietrich had this to say:

"We are pleased that AI obviously recognises the advantages of our cards like PowerUp boards as the best solution to move forward the Amiga technology today and without leaving the installed user-base incompatible with a new product generation.

> Rumours also say that phase 5 have a complete computer system in the works which is based on PowerUp technology...

We now expect to see fast-growing support from all those software vendors who have been reluctant to start their PowerUp development so far. At phase 5 we have lots of developments ongoing, such as the new CyberGraphX AGA and CyberGraphX PPC Native or the CyberGL PPC Native libraries, just to name a few. We are greatly expanding the functionality of our PowerUp System Software to fulfil the needs as a major stepping stone towards a revised, enhanced an also PPC-native AmigaOS."

Dietrich further said that so much effort has been poured into PowerUp, and related developments like compiler software, that it would take at least a year for Amiga Inc. to get to the same level if they chose to go a different route.

"We are now at the point where PowerUp technology for Amiga can really take off, and we have realised a hardware and software technology that will allow, for example, the design of multi-threaded multi-processing system's based on AmigaOS, or the integration of fast hardware 3D graphics and other exciting stuff."

Despite this good news for the PPC, Wolf Dietrich also sees issues which remain open after the AI announcement. "We believe that there should be a clear technology leadership and a clear and single path for future development.

"To make the AmigaOS ready for the future there must be concepts and guidelines for future developments beyond an update of the current OS version. Also, Amiga Inc. should make sure there is a unified development of the AmigaOS."

When asked about phase 5 licensing the AmigaOS, he said:

"We are currently negotiating for an AmigaOS license. Whether we will go for a license of AmigaOS 3.1 as is, or even for a source license which will allow us to modify and enhance AmigaOS for our future products, will depend on the concrete development plans of Amiga Inc."

Rumours also say that phase 5 have a complete computer system in the works which is based on PowerUp technology which incorporates features like an option to install multiple PowerPC CPUs, an integrated 3D graphics subsystem and a PCI bus. Dietrich didn't confirm this, saying:

"We are currently working hard to catch up with the delays that we had in our development plans. The PCI bridge which is built into our new CyberVisionPPC and BVisionPPC graphics boards is currently in the simulation.

"We will use the logical building blocks from the PowerUP development for integration into future products. These products, which are to be announced soon, will bring new life and excitement to the Amiga market."

Many Amigans have asked *AF* about the A\BOX. There have even been rumours that phase 5 may cancel their high-tech projects. Such rumours have been denied and the A\BOX project is postponed but not cancelled. Dietrich said: "The A\BOX will remain our long-term technology project, driven by our vision of highly integrated computing, but we need to put more time and effort into this project than we initially expected.

"We'll also be looking at a new generation of PowerPC CPUs to come, and extend the specifications of the bus interface and memory bus towards these new CPUs to meet their performance requirements.

"We will probably be going for a increase of the memory performance to a peak of more than 3 GB/s with these concepts, and we'll further evaluate the available and upcoming 3D technologies and the competitiveness of the integrated RISC-like DSP functionality. More advanced technology will be used, and it is likely that the Caipirinha chip will initially run at a clock speed of more than 300MHz.

"It is our goal to keep the system open towards upcoming developments and industry standards. The revised A\BOX project will be targeting a release of the product in 1999, and we are currently not planning that it will be early 1999. Because of these significant delays, we will have to make sure that we integrate the most up-to-date and innovative concepts, and also will have very progressive software concepts.



phase 5's Wolf Dietrich: "We will be extending the PowerUp range".

"Meanwhile, we will be extending the PowerUp product range, and bring out new and stunning products based on this technology which will provide the potential to significantly enlarge the Amiga market. This will make sure that PowerUp is supported into the next millennium."

More information is available on phase 5's web site at http://www.phase5.de.

In yet more phase 5 news, The Blizzard 603e Power Board finally went into production at the end of January and will start shipping in the second half of February. According to phase 5, some design problems had delayed the finalisation of this product which was presented to the public at the Cologne show in November 1997. Now all A1200 users can look forward to getting real Power(PC) for their machines, too.

As the faster Blizzard 603e versions and those with the 68060 are still quite expensive, phase 5 plans to put a marketing focus on the low-end boards with inexpensive '040s and the 166 or 200MHz CPU. "We will start to ship the 166 MHz versions first, and later the 200 and 250MHz versions,as we currently have some 9-10 weeks delivery lead time on these faster PowerPC chips."

The Blizzard 603e Power Board comes along with a complete software demo package, including an MPEG player that allows for MPEG playback in small resolutions even on the Amiga's AGA standard graphics.

phase 5 will offer special upgrade and crossgrade deals for all accelerator owners.

1. There won't be an '030 version coming out (formerly named Blizzard 603e), only the 040/060 version will be available (formerly known as Blizzard 603e+).

2. The '+' sign will remain and will indicate that the board is equipped with a SCSI controller, while the standard low-cost Blizzard 603e will come without SCSI; this decision has been made as only appx. 20% of all Blizzard 1230-IV and Blizzard 1240/1260 customers bought a SCSI controller, and phase 5 wants to offer a lower-cost entry product. The SCSI controller cannot be upgraded later, however – this is a compromise due to the design requirements.

Blizzard603e

Speed	68LC040-25	68040-25	68060-50
160MHz	£239	£249	£489
200MHz	£299	£309	£539
250MHz	£359	£369	£599

Blizzard603e+

Speed	68LC040-25	68040-25	68060-50
160MHz	£289	£299	£529
200MHz	£349	£369	£599
250MHz	£409	£429	£649

Continued overleaf ➡

Source code sensation!

As if the news that the *Doom* source was made freely available during the Christmas season wasn't enough, how do you all feel about an Amiga version of Netscape, or *Descent* for that matter?

Netscape Communications, Inc. announced on January 22nd this year that, from that point onwards, not only would Netscape Navigator and Communicator Standard Edition 4 become completely free of charge, but that Netscape had signed a GPL (Gnu Public License) to release the whole of the Netscape Communicator v5 source code to anyone who wants it.

It only took about six days for the first *Doom* ports to hit the Amiga. Communicator is a far bigger project but, even so, by the time you're reading *Amiga Format* issue 110 this spring, you could be browsing the net using a version of Netscape developed exclusively for the Amiga.

It's Netscape, but on the Mac. An Amiga version may not be far off though.



For more information on Netscape's plans, you could do worse than to keep an eye on the Amiga Web Directory at http://www.cucug.org/Amiga.html and on Netscape's web page at http://home.netscape.com.

The *Descent* source code is a lot easier to compile on the other hand. Parallax Software, the creators of *Descent*, *Descent II* and *Descent Maximum*, released the source code for the engine behind this game on January 24th, 1998, and accompanied it with this soundbite from Mike Kulas, the president and found of Parallax;

"We figured that a lot of people aspiring to work in the game industry would like to see production quality code. There are two reasons for this. One is that you can learn a lot by looking at working code. The second is that people will see that you can write a decent game without writing beautiful code."

The source code will be available free on http://www.ladder.org/ddr/ by the time you read this.

The site's maintainer, Kevin Bentley, has agreed to support any developers using the code.



Animation news

Dale Hemenway, the organiser of the animation competition we brought you news of last month, wanted us to tell you that he now has a VHS (PAL) video available of the 5 minute film *All Talk* that was created using the Amiga.



Also included on the video is an 8 minute film (not created on the Amiga) called *Horace & The Magic Motorcycle*, which is actually a first rough cut of a pilot film for a proposed children's animated cartoon series. This has never been shown on TV and is not available anywhere else.

A new Amiga animation created especially for the video is also included, as well as an information sheet detailing how the *All Talk* film was created. The cost of the video is £8.99 including post & packing.

Please send orders to Dalemation, 18 Sneyd Hall Road, Bloxwich, Walsall, WS3 2NP and make cheques payable to Dale Hemenway.

New version of ImageFX imminent

By the time you read this, there should be a new version of *ImageFX* available. "*ImageFX 3.0* can be called the 'Users Request' upgrade as it is built upon the input of our users!", says Bob Fisher, Vice-President in charge of sales at Nova Design, Inc. "We've made wonderful changes to the interface, adding instant asynchronous redrawing of your images, larger previews that can be magnified, multiple image windows, real image layers, and many more special effects"

As you can see from the pictures, Nova Design haven't been slouches when it comes to updating their interface design. Child windows can now remain open so that you can continue to have easy access to tools and functions and *ImageFX* now offers much more cross-platform flexibility, including the ability to read and write *Photoshop* format files, complete with layering information.

New effects modules further add to the arsenal of Hollywood-style tools that *ImageFX* users already have at their fingertips including:

- **a Clouds module which allows you to generate true fractal clouds that can animate their movement and evolve over time.**
- **a Scatter module that allows you to blow images apart in various different ways.**
- **a Splash module that uses raytracing and bump mapping to simulate liquid-like rain or water-ski surf.**
- **a PageCurler module. This staple of *Photoshop* and numerous other image processing packages has now been added to the *IFX* stable.**
- **an FXForge module. This uses simple mathematical expressions which get applied to each pixel in the image (similar to convolutions), and is a superset of the same technology used in Adobe's Filter Factory plug-in for *Photoshop*. This means that you can use the many hundreds of predefined expressions for this plug-in that you can easily find on the Internet.**

For more details on upgrading, contact Wizard Developments on 0181 303 1800.



A radical new look to the interface is only half of the story...

Project Alpha gets underway

HiQ has announced its ambitious "Project Alpha". This consists of a gradual porting over of the complete Amiga platform to a DEC Alpha-based industry standard motherboard over the course of the next year or so.

As of this moment, HiQ are at stage one of their plan, with the remaining stages looking something like this:

Stage One.
Siamese RTG System v2.5 links existing Amigas via Ethernet to any Alpha machine including the new range supplied by HiQ

Stage Two – Shipping Q1 1998.
Supplying Alphas to Amiga and ex-Amiga owning customers or supplying existing Alpha users with a choice of products linking the Amiga and the Alpha, including the possibility of the Access Amiga (an Amiga on a card which will fit in a 5.25" bay).

Stage Three – Shipping in Q2-Q3.
Designed around the "Inside Out" PCI based Amiga on a card from Index Information Ltd. and the Siamese *RTG v3.0* software from HiQ Limited and Paul Nolan, this System would create an impressive Amiga and Alpha combined Multi-OS machine – all powered by the Amiga.

This system should have numerous advantages over existing Amigas including faster graphics and the ability to use the PCI bus on the Alpha.

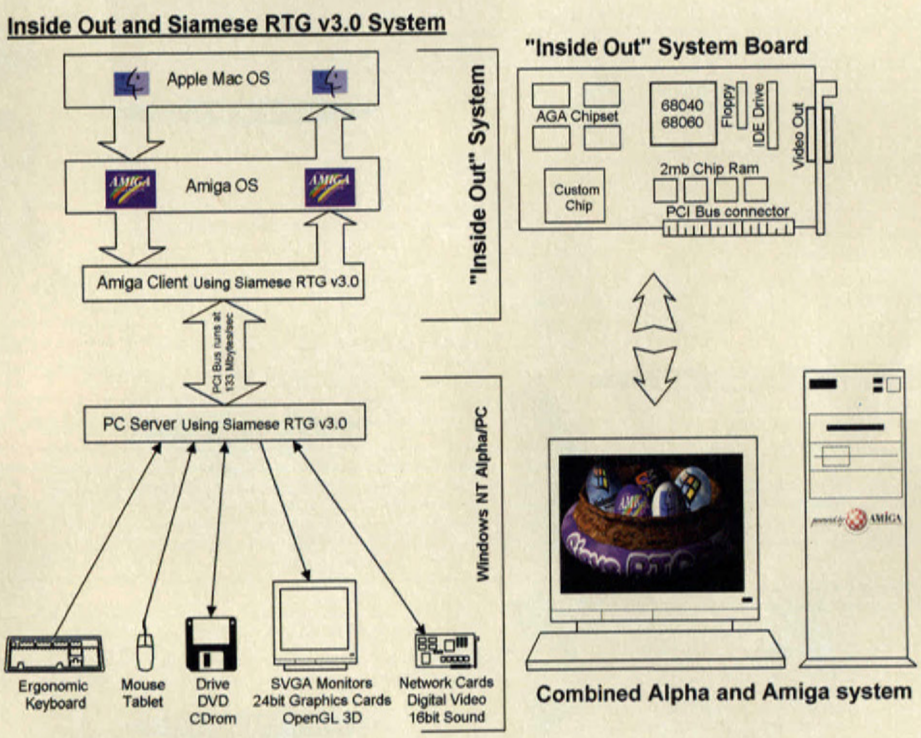
Stage 4 – AmigaOS to Alpha Porting Plan. Starts Q2.
Starting the port of AmigaOS to Alpha.

Stage 5 At Q3-4.
Once this system is shipping, all users who purchased the Alpha upgrade path license package will receive their first upgrade. This will include sections that can be removed from the Amiga OS control fairly easily and handed over to the Alpha to speed them up, like graphics, sound, file handling and so on.

There will be improvements to some functions like the maths functions and additions to OS, to allow software to call Alpha Maths libraries to speed up floating point operations.

Stage 6 – Q1-2 of 1999.
Once finished, the entire OS will be Alpha based and only using the Amiga Card for software that relies on the Amiga Custom Chip set, although hopefully an ECS and AGA emulator may solve this problem.

This is an extremely exciting and ambitious plan, we're sure you'll agree. You can find out lots more information about this project at HiQ's website at http://www.hiq.co.uk or by ringing them on 01525 211327.



Stage Three of Project Alpha integrates Amiga hardware and software seamlessly with Alpha hardware for the ultimate multi-platform machine.

SURREY Amiga users

Calling all Amiga users in Surrey. If any of you live in or around Surrey you may be interested to hear about KICKSTART, The Surrey Amiga User Group. Upcoming plans include Shapeshifter and Tower projects and bring and buy events. If you are interested, check out the website at http://www.arrakis.u-net.com or contact their secretary Rob Gilbert on (01932) 875336 or write him at 10 Brox Rd, Ottershaw, Surrey, KT16 0HL.

New IRC channel

Chris from Digital Candy recently told me that a new IRC channel for those that like to get vocal has been permanently opened on most UK and European servers. The channel is called **#am!ga** and is on the standard port of all IRC servers that carry it.

New IRC software

Just to go with the previous item, if you're online and you haven't tried IRC, then you won't know about one of the best ways to make your phone bill even bigger! Vaporware have just released version 2 of their excellent IRC software *AmIRC*. New features include:

- Query and channel windows that can now be iconified individually to "tray" windows.
- Lag-o-meter to test server lag while online to a server.
- Better flood protection.
- And much, much more.

For all the updates, or to download the Shareware version of *AmIRC*, got to http://www.vapor.com.

Diary

Upcoming events for you to note in your diary:

- CeBit 98 – the world's largest computer-oriented show, March 19th-25th 1998. Contact Deutsche Messe, 0049 511 890.
- Nottingham Amateur Video Festival, Sunday May 10th 1998. Contact Robert Scotton, (0115) 931 2386.
- Live 98 – technology show, 24th-27th September 1998. Contact Blenheim Exhibitions (0181) 742 2828

NEW... POWER UP

AMIGA™ GOES POWERPC™

POWER UP YOUR AMIGA...

*A further dimension is being added to Amigas with our new PowerPC based **BLIZZARD POWER BOARDS** for A1200, A1200 based Tower Systems and A1500/2000 systems along with the new **CYBERSTORM PPC** for A3000/4000 systems. You'll now be able to benefit from performance many times beyond the speed of the fastest 680x0 based boards.*

Designed as upgrades for existing systems, **Power Boards** incorporate innovative dual processor technology where a fast PowerPC RISC processor is combined with a 68k CPU, dynamically sharing memory and system busses.

While the original AmigaOS 3.x continues to run on the 68K CPU, supporting existing applications to provide backward compatibility, the PowerPC CPU is backed by comprehensive PPC Libraries which provide the functionality to integrate PowerPC into an Amiga multitasking environment.

Software developers can easily optimise their programs, step by step, porting single tasks to PowerPC code, which then run in parallel with 68k tasks. Leading Amiga software vendors are preparing ported or optimised versions of their software packages already. It is anticipated that a large quantity of software products supporting the PowerPC will be available soon.

Power Boards will be delivered with a comprehensive suite of utilities, including the PPC library, as well as tools for creative users. Among them is a Public Domain GNU C compiler for PowerPC (including sourcecode), many demo programs and utilities with sourcecode. In addition to this software, free developer support is available via FTP site.

Last but not least, a PowerPC optimised version of CyberGraphX V3 with RISC optimised CyberGL/3D plus MPEG functions and libraries is included (along with a special GGX driver to support the AGA chipset) with full and comprehensive documentation.

	Blizzard 603e PowerBoard	Blizzard 603e+ PowerBoard	Blizzard 2604 PowerBoard	Cyberstorm PPC
PowerPC CPU Clock Speed	603e 160-250MHz	603e 160-250MHz	604e 150-200MHz	604e 150-200MHz
Companion CPU	68030 50MHz	68040/68060 25-50MHz	68040/68060 25-50MHz	68040/68060 25-50MHz
Est. PPC Performance MIPS SpecFP95	@ 250MHz Approx. 280* Approx. 3.5	@ 250MHz Approx. 280* Approx. 3.5	@ 200MHz Approx. 350* Approx. 7.1	@ 200MHz Approx. 350* Approx. 7.1
Memory Option SIMM Sockets	Max. 128Mb 2	Max. 128Mb 2	Max. 128Mb 4	Max. 128Mb 4
SCSI On Board	Fast SCSI-II	Fast SCSI-II	Ultra Wide	Ultra Wide
Amiga Compatibility	A1200(T)	A1200(T)	A1500/2000	A3000/4000(T)
Est. Availability	DEC '97	DEC '97	Summer '97	Summer '97

Blizzard 603e Power Board - A1200(T)

The new Blizzard 603e Power Board is an inexpensive Power Up Accelerator for A1200 system owners who already have a board with a socketed full 50MHz 68030+MMU processor (these CPUs have a gold finish to the top surface) eg.50MHz Blizzard 1230-II, III, IV or similar. Featuring a 160-250MHz PowerPC 603e RISC CPU, the board has a socket for the 50MHz 68030, expansion capabilities of up to 128Mb high speed memory and built in SCSI-II controller.

Imagine the performance from your A1200 with this low cost board!

Blizzard 603e+ Power Board - A1200(T)

The Blizzard 603e+ Power Board is the highest spec Power Up Accelerator for A1200 systems. Featuring a 250MHz PowerPC 603e RISC CPU, the board has a socket for a companion 68040 or 68060 CPU, expansion capabilities up to 128Mb of high speed memory and built in SCSI-II controller. This board is ideally suited to those owners who already use an accelerator with either a 68040 or 68060 CPU (ie. Blizzard 1240TERC or Blizzard 1260 owners or their equivalents)

If you want the BEST from YOUR Amiga A1200 - this is it!

Blizzard 2604 Power Board - A1500/2000

If you own either an A1500 or A2000 you can now take advantage of PowerPC technology with this 604e CPU RISC based board which has a socket for a companion 68040 or 68060 CPU, expansion capabilities up to 128Mb of high speed 64-Bit memory, built in Ultra-Wide SCSI controller and a high performance expansion slot for expansions such as the CyberVision PPC. This board is ideal for owners of accelerators with 68040 or 68060 processors such as the Blizzard 2040 or Blizzard 2060 owners (or their equivalents).

Want the BEST from YOUR Amiga A1500/2000? - Look no further!

CyberStorm PPC Board - A3000/4000(T)

CyberStorm PPC is the ultimate accelerator for Amiga 3000[T], 4000[T] and systems with compatible CPU slots, offer blistering 604e performance - more than 10 times faster than any 68k based accelerator on sale today! Available with clock speeds of 150, 180 and 200MHz, the companion socket for the 68k processor accepts either a 68040 or 68060 CPU. The board provides 64-bit wide extremely fast memory expansion using pairs of standard SIMMs, dynamically shared by the two CPUs. Additionally, CyberStorm PPC comes with a DMA driven Wide ULTRA SCSI controller on board offering transfer rates of up to 40Mb/sec for even the most demanding of professional applications. A 32Bit high speed expansion connector, with DMA access to the main memory, is also provided for later upgradeability.

The 200MHz version of the CyberStorm PPC provides performance of more than 350 MIPS or approximately 8.1 SPECint95 and 7.1 SPECfp95*... breathtaking speed that goes far beyond that offered by most PC systems. In the second half of the year, an advanced graphics board will become available for the CyberStorm PPC expansion slot, providing a subset of the innovative CAIPIRINHA custom chip. By having a stand alone version of the DLRP (Display List Risc Processor), this board will offer superior display capabilities through higher VRAM-based resolutions, pixel depths and speeds, as well as the potential to begin developing software supporting the functionality of the forthcoming A\BOX system.

PRICING AND AVAILABILITY:

Options with or without 68k CPUs will allow users to fit the CPU from their existing accelerator. Delivery of Power Boards is scheduled for Summer 1997 following finalisation of CE approvals. Call now for full details.

Special prices available to existing BLIZZARD & CYBERSTORM board users

Blizzard 603e/603e+ Board...	160MHz	200MHz	250MHz
with Empty 030/040/060 Socket	£269.95	£359.95	£429.95
with 68030/50MHz fitted	£302.95	£392.95	£462.95
with 68040/25MHz fitted	£305.95	£395.95	£465.95
with 68040/40MHz fitted	£331.95	£421.95	£491.95
with 68060/50MHz fitted	£466.95	£556.95	£626.95

Cyberstorm PPC 604e Board...	150MHz	180MHz	200MHz
with No Processor	£479.95	£549.95	£629.95
with 68040/25MHz fitted	£519.95	£579.95	£669.95
with 68040/40MHz fitted	£549.95	£609.95	£699.95
with 68060/50MHz fitted	£709.95	£769.95	£859.95

**Quoted performance figures are estimations based on specifications from Motorola/IBM and are relevant to the PowerPC processor only. Prices include VAT @ 17.5%. Owners of other makes of board or those who don't already have an appropriate CPU - please call for prices.*

POWER PC TECHNOLOGY, POWER PC SPEED and POWER PC PERFORMANCE

Harwoods... always the Fastest Amiga Boards and NOW PowerPC Technology for Amigas too!



CYBER BLIZZARD SPEED

STILL THE FASTEST, NOW LOWER PRICED, NO ONE ELSE EVEN COMES CLOSE!

CYBERVISION PPC

BRAND NEW... Estimated Availability FEB '98

HIGH END GRAPHICS CARD for... PowerUP, CyberStorm PPC and Blizzard 2604 PowerBoards

The CyberVision PPC is a high performance graphic card which can be installed on the expansion slot of the PowerPC 604e based PowerUP Accelerators, the CyberStorm PPC and the Blizzard 2604 Power Board. The use of CyberVision PPC is highly recommended for use with the Blizzard 2604 Power Board to speed access to the ECS Chip Memory or Zorro II based graphics boards found in A1500/2000 Amigas.

Performance of CyberVision PPC benefits from the high data bandwidth achieved by direct connection to the processor bus utilising the graphics direct connector which incredibly speeds up, for example, 3D rendering/display. Breathtaking performance is enhanced not just by the ultra fast processor access into the video memory, but also the internal speed and functionality of the CyberVision PPC.

CyberVision PPC is equipped with the powerful PERMEDIA2 Graphics Controller providing outstanding 3D performance of up to 80 million textured 3D pixels/sec, with hardware accelerated rendering functions such as z-buffering, gouraud shading, fogging, blending and anti-aliasing. As the design of PERMEDIA2 hardware suits OpenGL implementation, its 3D performance can support CyberGL functionality of CyberGraphX V3 Native which is supplied with PowerUp boards. In combination with the high floating point performance of the PowerPC 604e processor, a breathtaking performance in professional 3D applications can be achieved. Additionally, the PERMEDIA2 processor supports functions such as colour space conversion, chroma keying and XY-Scaling which is used by the software MPEG decoding routines of CyberGraphX V3 Native.

- 64Bit Wide SGRAM with data throughput of up to 800Mb/sec - allows ultra fast RAMDAC to display up to... 1280 x 1024 in true colour at 85Hz screen refresh rate and... 1600 x 1200 in true colour at 60Hz or high colour at 85Hz.
- 4Mb or 8Mb Display Memory options

CyberVision PPC... 4Mb Display Version — **£CALL FOR LATEST NEWS**
CyberVision PPC... 8Mb Display Version — **£CALL FOR LATEST NEWS**

EASY TRAPDOOR INSTALLATION... No modification necessary. Reliable low heat output.

1260 TURBO ACCELERATOR MEMORY BOARD

A1200 TURBO ACCELERATOR and MMU/FPU
50MHz 68060 - 0Mb Standard, expandable to 64/192Mb
38.71MIPS with single sided 60/70 Nanosecond SIMM fitted.



Offers Amiga A1200 owners FULL 68060 POWER with a board that simply plugs into the trapdoor slot. Your A1200 will then operate at TWICE or even THREE TIMES THE SPEED of an '040 based upgrade and up to FIVE TIMES THE SPEED of a standard A4000! Available options such as the SCSI-IV Kit and RAM are shared with the Blizzard 1230-IV and 1260.

Blizzard 1260 Turbo 50MHz 68060 and MMU/FPU, 0Mb 32Bit Fast RAM, exp. to 64/192Mb **£319.95** LOWER PRICE!

EASY TRAPDOOR INSTALLATION... No modification necessary. Reliable low heat output.

1230-IV TURBO ACCELERATOR MEMORY BOARD

A1200 TURBO ACCELERATOR and MMU
50MHz 68030 - 0Mb Standard, expandable to 128/256Mb
9.91MIPS with 60 Nanosecond SIMM fitted.



The highest performing 68030 Accelerator available for your A1200. With its 50MHz 68030 and MMU, the 1230-IV offers BETTER PERFORMANCE at a LOWER PRICE. With a Sysinfo rating of 9.91 (using a 60 n/s SIMM) you can see the 1230-IV is very fast... a performance gain of up to 500% is achieved! Via its Fast Expansion Bus, an optional SCSI-2 Controller module can easily be fitted. An industry standard SIMM socket provides for up to 128Mb of auto-configuring 32Bit Fast RAM (up to 256Mb with the SCSI-2 option using its extra SIMM socket).

LOWER PRICES!

Blizzard 1230-IV Turbo 50MHz 68030 and MMU, 0Mb 32Bit Fast RAM, exp. to 128/256Mb **£89.95**
Fast 60 Nanosecond SIMM RAM Expansions - 32Bit, 72Pin **£Call**
Motorola Maths Co-Processor - 68882 PGA type FPU, 50MHz **£39.95**

BLIZZARD SCSI-IV KIT

SCSI-2 MODULE for 1230-IV, 1240T/ERC & 1260, & ADDITIONAL 128Mb SIMM SOCKET
(Fast SCSI-2 DMA Controller - upto 10Mb/s transfer rates with additional SIMM socket/extra RAM)



Blizzard SCSI-IV Kit **£59.95**

1230-IV and 1260 FEATURES

- May be disabled with simple keystroke on boot up - for full games compatibility, even badly programmed/older software
- Battery backed self re-charge Real Time Clock
- High performance expansion with full 32Bit wide DMA
- Easy trapdoor installation - no modifications required
- 1230-IV features PGA FPU socket allowing optional 50MHz 68882 FPU

CYBERVISION 64/3D

64-Bit ENGINE A2000/3000/4000 (T Series) 3D VERSION 24-Bit COLOUR ACCELERATED GRAPHICS CARD.



LOWER PRICES!

For all Zorro-3 and Tower System A1200s with Zorro II backplanes. The core of this great board is the VIRGE GRAPHICS CHIP from S3. With 3D capabilities, it's able to process complex 3D functions in hardware (eg. shaded & textured surfaces) with Trilinear Filtering and Shading/Fogging for super realistic Real Time 3D Rendering. When used with CyberGraphX 3D library, Cybervision 64/3D can even offer a broad range of 3D facilities for any software developer.

CyberVISION 64/3D... 4Mb Version **£139.95**

MPEG Decoder - added to the Feature Connector to provide real time MPEG audio and video decoding at full size custom screens or, in Workbench windows (HQ display using 16/24Bit modes from CyberGraphX Workbench). Stereo audio output is provided via the supplied dedicated line output jack. Upgrade to a Cybervision 64/3D and MPEG bundle (from previous Cybervision 64) for a special low price! **£149.95**

Monitor Switcher - with integrated scan line doubler. Designed to fit into the Amiga slot, this gives full automatic switchover from the standard Amiga signal to Cybervision 64/3D's output. Both cards may be fitted inside A3000/4000 models leaving three Zorro-III slots free. **£69.95**

CYBERSTORM II

AMIGA 68060 ACCELERATOR



LOWER PRICES!

Cyberstorm II is an ultra powerful graphics accelerator. When you fit a Cyberstorm II 68060 Accelerator to YOUR A3000, A3000T, A4000 or A4000T you can for example, render a graphic with Imagine 2.0 software in just 2.4 minutes! Compare that with 10.34 minutes on a standard A4000 '040/25!

With no jumpers, both Cyberstorm II models are fully plug and play and, A4000 users even have the option of a SCSI-2 Module if they wish (A3000s already have SCSI built in).

- Up to 128Mb of standard SIMMs can be installed and you can even transfer the 72Pin SIMMs from your Amiga A4000 straight onto your new Cyberstorm.
- Optional SCSI-2 Module
- If your budget currently only covers the cost of Cyberstorm II 68040ERC, you can always upgrade later to the full 68060 processor for the extra power!

Cyberstorm II 68060/50 50MHz 68060 - 0Mb, Expandable to 128Mb LAST FEW AVAILABLE... **£389.95**
Cyberstorm II SCSI-2 Module **£69.95**
Cyberstorm II SIMM RAM Expansions (Please call for a range of SIMM prices) **£Call**

CYBERSTORM III

AMIGA 68060 ACCELERATOR



BRAND NEW...

NEW Cyberstorm III is the latest high end 68060 Accelerator Board for YOUR A3000, A3000T, A4000 or A4000T (or system with compatible slot). Features a high performance 68060 processor at 50MHz clock speed, a memory expansion option for up to 128Mb of ultra fast 64Bit memory, a Wide-Ultra-SCSI controller on board and an expansion slot for high performance expansions such as the CyberVision PPC.

- Up to 68Mb/sec sustained memory transfer rate - ideal for applications demanding the use of large amounts of data. Memory design of the Cyberstorm III is 50% faster than the Cyberstorm II resulting in real world application performance increases of up to 25%!
- Wide-Ultra-SCSI Controller onboard
- Expansion up to 128Mb of ultra fast 64Bit memory
- Expansion slot for high performance expansions - eg. CyberVision PPC etc,

Cyberstorm III 68060/50 50MHz 68060 - 0Mb, Expandable to 128Mb **£469.95**
Cyberstorm III RAM Expansions (Please call for a range of RAM prices) **£Call**

MOTOROLA MOTIVATED

Blizzard and Cyberstorm products use MOTOROLA 680X0 and PowerPC series processors. They run **WITHIN** the electrical timing specification laid down by Motorola to prevent any possible overheating/reliability problems. So, when you pay for a 50MHz CPU for example, that's exactly what you get... not a 40, 33 or even a 25MHz CPU "clocked" to 50MHz! Look out for the **MOTOROLA MOTIVATED** logo - your guarantee of our commitment to quality and reliability - **BEWARE** of "clocked" CPUs! T/ERC and ERC processors used on selected boards are recycled and vigorously tested 68040 CPUs operating at 40MHz - an excellent guaranteed and competitively priced alternative.

What the Magazines think...

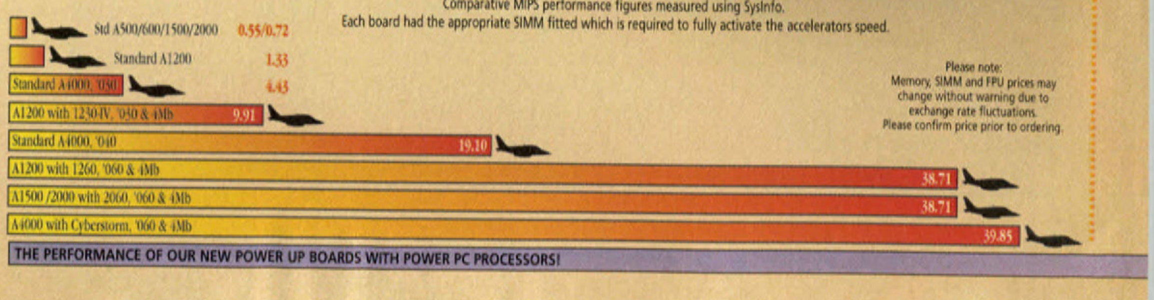
Blizzard products have consistently achieved the highest magazine accolades and awards!

Amiga Shopper *"...1260 is destined to become the ultimate object of desire for A1200 owners"* - **91% STAR BUY Award**
Amiga Computing *"...If you want the fastest Amiga in the World, get this board"* - **92% BLUE CHIP Rating**
Amiga Format *"...Ride on the fastest A1200 in the World..."* - **95% GOLD Rating**

OUR RANGE HAS WON MORE AWARDS THAN ANY OTHER

JUST COMPARE THE PERFORMANCE FIGURES FOR YOURSELF!

Comparative MIPS performance figures measured using SysInfo.
Each board had the appropriate SIMM fitted which is required to fully activate the accelerators speed.



Please note: Memory, SIMM and FPU prices may change without warning due to exchange rate fluctuations. Please confirm price prior to ordering.

Games Explosion!



GAMING SPECIAL!

Welcome back! If you read our Game On feature in ***AF98*** and ***AF99*** you'll know that things are happening in the Amiga games industry. The question is: have they happened yet? **Ben Vost** gives you the answers you seek.



Last June we ran a feature on new gaming for your Amiga, and it seems to have been a timely one. We started the feature with a statement that pretty much said that new Amiga games would come on CD, like *Myst*, for example; might require a graphics card, like *H-Bomb*, perhaps; and would have Internet connectivity for multiplayer games – *Quake* anyone?

It seems that we were fairly on-the-ball with our predictions, but there are more to come yet. What about more PC ports now that *Doom* is freely available on the Amiga, or that clickBOOM have done such a fine job of converting *Myst* and *Quake*? What about PowerPC only games that really utilise the processor? Or the 3D abilities of the CV3D? Or the new 16-bit sound cards? Whenever you get what you want, you'll find that you actually want more.

The games scene on the Amiga now seems more buoyant than in recent years by a long chalk. Only this month we actually received too many games to fit into our magazine and we anticipate next month being the same, with *Quake*, *Genetic Species* and others crowding around. There are more new game announcements than ever before, to the point where the big names in games publishing in this country like Vulcan, Sadeness and Epic, can't keep up. We'll go through some of these games in the course of these pages. Of course, if we haven't mentioned you or your game, then it'll be down to one of two things: 1. There just isn't the ROOM! 2. You haven't told us what you're doing.

> *All this means that the games scene is looking buoyant once again, with more people interested in programming...*

The one thing that this past year has proved is that games take longer to make than people thought. There always has been a lot of slippage in the computer games industry, but never more so than now, when the authors are coding in their spare time. This of course means that games we had predicted to be available last summer, last autumn or before Christmas quite often aren't with us yet. *H-Bomb* (previously *Zone 99*) from Aurora Works is a good example of this, as is *Genetic Species* from Vulcan.

Part of the reason given for this is the fact that, a lot of the time, authors are having to re-invent the wheel when it comes to RTG or network play. But things are changing. With the advent of easy-to-use APIs like RTGMaster, AMarquee or AHI, it means that games coders can get on with the all-important work of making the game fun and letting the authors of these other projects shoulder some of the work of actually getting the game out.

Although the Amiga doesn't have all encompassing game APIs like the PC or Mac, it is unique in the fact that it does have some of these facilities – often given for free by dedicated programmers whose contributions have little value on their own, but have immense consequence for the people who wish to use them.

Of course, the PowerPC presents new challenges for games authors. At the moment there isn't an awful lot of help for these people in the form of PPC-friendly versions of AHI, RTGMaster or AMarquee (a network API). This is guaranteed to change over the course of this year, opening up new opportunities for some stunning gameplay. But it seems as though a lot of you already have pretty powerful systems. The AFCDsurveys that I receive indicate a base machine that has a 68030 running at 50MHz, at least 8Mb fast RAM and a 4x CD-ROM, but of course I'm only getting surveys from people with a CD-ROM drive and people who are keen to talk about their machines. Anyway, onto the games we have

Continued overleaf ➡







Myst has already proved to be very popular with Amiga gamers the world over. Now, *Riven* anyone?









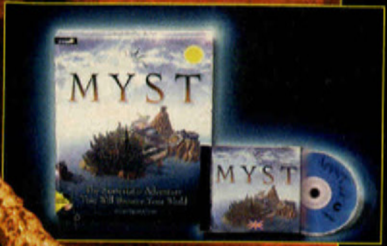




Ports of *Doom* are running on people's Amigas all over the world right now, while they wait for *Quake* Amiga.

QUAKE
AMIGA
IDSOFTWARE PXLCOMPUTERS CLICKBOOM

C·L·I·C·K BOOM





Give me

We talked to Sofia Tsiotsikas of clickBOOM about their port of *Quake*, which should be out by the time you read this.

AF: So *Quake* finally hits the Amiga. What was the background behind you bringing this game to the Amiga and what are your hopes and fears for it?

cB: It was a strange coincidence as we were running our conversion wish list and *Quake* took the second spot. At the same time, the first illegal *Quake* hacks appeared on the Amiga, and so one thing led to another.

Obviously we hope to sell it well. However, there are other extremely important issues here. *Quake* is unlike any other game out there because:

1. It features the most advanced 3D engine in the world.

clickBOOM's track record with *Capital Punishment, Myst* and *Quake* is probably the finest on the Amiga.

news of for the coming months. The first one of interest is *Martian Tales*. Programmed by Skillo Interactive, a group of three English students, it is another real-time strategic wargame. According to one of the game's authors, a guy known only as Capewell, the storyline goes something like this:

"The game consists of two parts. The first is a trade, strategy-type game a bit like Colonization *but faster and more simple.*

Unlike Colonization, *the battles are the main points of the game and can either be randomly worked out or played in the style of* Warcraft *or* Tiny Troops. *The greys are able to trade in narcotics, slaves, obsidian etc... but only gain rank through excessive murder of the Smeglings. The Smeglings are fighting back and it is also the time of the 1,326th coming of the hero. Unlike the other 1,325 heroes who died rather miserable deaths, maybe the new one can lead them to the Promised Land."*

Although the team have not yet signed up with a publisher, this looks like being a nice bit of work.

In a similar vein we have *Caveman Species*, being written by Portuguese coders Black Flag, another real-time war game, this time set in the dim and distant past. Like *Martian Tales* we don't anticipate this one being too serious either! And keeping up the theme, we also have *Maim and Mangle*, set in Ed Collins' *Explorer 2260* universe which

I JUST CAN'T WAIT

Thanks to the vagaries of the space time continuum, there are games that we mentioned in our previous instalment of Game On that still haven't come out yet, despite having assured you that they would be out by Christmas. Therefore we present an updated schedule which will, no doubt, look just as silly in a year's time:

FOUNDATION	Sadeness	End February
GENETIC SPECIES	Vulcan Software	Out now
QUAKE	clickBOOM	Out now
H-BOMB	Aurora Works	End February
HARD TARGET	Vulcan Software	Start of June
MAIM & MANGLE	Vulcan Software	By end 1998
EXPLORER 2260	Vulcan Software	By end 1998
6TH SENSE INVESTIGATIONS	Epic	End of March
HAUNTED	Alive Mediasoft	Autumn 1998
GILBERT GOODMATE	Alive Mediasoft	Summer 1998
EAT THE WHISTLE	none yet	By end of 1998
MARTIAN TALES	none yet	???







Sixth Sense Investigations, Genetic Species and *Haunted* will all be coming to your machine soon.

more ports!

2. Its Internet play option is most widely used and definitely the most fun. There are hundreds of dedicated *Quake* servers around the world with players competing around the clock. Finally, Amiga users will be able to join the largest Internet gaming community and play against PC and Mac users.
3. Expandability. *Quake* is unlike any other game as it can be expanded and changed into a completely different game. There are thousands of expansion packs, levels, demos, movies and other related files on the Internet and in stores. Most of the Internet files are Freeware and the only requirement is *Quake*.
4. It pushes the hardware to its limit. This will end the debate "Why would I invest in Amiga hardware when there are no games to take advantage of it?". *Quake* is so complex and it's written in such way that it takes advantage of every aspect of your hardware.
5. Already dozens of PC web sites (and soon magazines) feature articles about *Quake* Amiga. It is a great promotion and a step closer to having the Amiga back to compete with rest of the gaming market.
6. If *Quake* Amiga succeeds we will have proved that the Amiga market is ready for big games again.

The biggest fear is piracy. The Amiga market must not allow such products to fail due to piracy. We have therefore talked to *Amiga Format* and other Amiga magazines around the world to allow only registered users to enter tournaments and competitions. Furthermore, Amiga servers will make sure that only registered users can connect and play over the Internet. And finally, every copy of *Quake* comes with a serial number so we can track down any illegal activities. *Quake* is too big for us to close our eyes on piracy, so we have decided to take active steps to prevent and prosecute any instances of it.

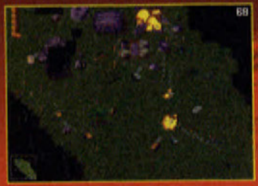
AF: Do you plan to also bring *Quake II* onto the Amiga?

cB: If sales of *Quake* prove to be good, and if id Software are satisfied with our conversion, it will be logical that we'd want to pursue *Quake II*. However, it is still too early to talk about it. What is important is that *Quake* will appear on the Amiga before the Nintendo 64 and Sony PlayStation versions are released, and that will be a tremendous boost towards bringing back the respect for the Amiga market.

AF: Will the fact that you have successfully converted both *Myst* and *Quake* to the Amiga mean that you'll be able to get other licenses a lot more easily?

cB: Definitely. We are already talking to various other companies about more conversions for the Amiga, and they feel much better knowing that the Amiga has games like *Myst* and *Quake*. This is especially true for North American companies who very often are not familiar with the European market in general, and especially Amiga market.






Caveman Species (above and left), a *Warcraft II* clone, and *Diversia* (below), both coming soon.



Above: *Alien F1* (soon to be called *Virtua GP* or *Grand Prix Simulator*) was a reader submission to our CD.




Great Nations (above and right) is a *Civilization*-type game.

will hopefully be released some time during this year.

Command and Conquer-style games aren't the only ones to surface, although they seem to be the most numerous. We've also heard of a *Resident Evil* clone called *The Dead Walk* from Gareth Murfin, long-term tester and IRCer extraordinaire, and a football game called *Eat the Whistle* by Italian coders Hurricane Software.

They also have a graphic adventure in the pipeline which is called *Escape Towards the Unknown*.

Shoot-em-ups also seem to be resurging in popularity. Skillo Interactive are bringing out a *Super Stardust*-type game called *Radioaction*, while Verkosoft are presenting the as-yet graphically uninspiring *Powder*. Darkage software have *Alive* coming out, a game which promises to have

Continued overleaf ➡

KEEP THE FLAME BURNING

There are several websites devoted to up-and-coming games based in the UK, all of which are pretty good. The first and most famous is Philip Cosby's AmigaFlame site, closely followed by Amiga Nutta. These sites get exclusives on games that no-one else has ever heard of before, by sheer dint of the fact that they are so well-known.

If you don't have net access, you can usually find a pretty up-to-date (as much as it can be) version of both sites on our CD every month, but to get the really hot news as it happens, it's a good idea to visit these pages regularly.

http://www.amigaflame.co.uk
http://www.nutts.demon.co.uk





These two sites provide some of the best online information for Amiga gamers anywhere. They're also on our CD.

over 120 bad guys on the screen at once – talk about hectic!

The best thing is that this has only scratched the surface of the huge number of games currently in development, from straightforward ports like the *Doom* variants, to clones of existing games on other platforms like *Lambda*, to completely new titles the likes of which have never been seen on the Amiga before.

Another thing that has changed about computer gaming is the increasing prevalence of authors being freer with their source code. We've already seen that *Doom*'s source (for the Unix version) was released at Christmas time by id Software. Now it's the turn of Parallax Software to give away the source code for their most famous game, *Descent*.

Hopefully others will follow suit and ports for the Amiga won't be such a problem in the future for two reasons. Firstly, the source code is freely available so coders like Peter McGavin, the author of *ADoom*, can show that the Amiga is capable of running what would otherwise be considered PC only games. Secondly, these companies should see that the Amiga isn't a 2Mb '020-based computer and think more seriously about releasing software for it off their own backs.

All this means that the games scene is looking buoyant once again, with more people interested in programming games than ever. What remains to be seen is whether the average punter will be able to buy any of these games in their favourite computer shops. As it stands, Amiga games are unlikely to be found in the more "casually" involved shops like HMV or Our Price. If your local Game or Electronics Boutique aren't stocking these games then you should pester them into doing so, rather than just muttering and leaving. Only by showing that there is a demand for these titles will there be a supply.





Now that the source code has been released, we should see versions of *Descent* (above and left) for the Amiga too.





Eat the Whistle (above and top right) is a brand new Italian football game.





The *Dead Walk* is going to be a *Resident Evil* clone for your machine.





Martian Tales looks like being a really fun game in two parts, from Skillo Interactive.

Maim & Mangle & chat!



We spoke to George Hornmoen, one of the main forces behind *Maim & Mangle*, about the game and his plans for it.

AF: Why did you start work on *Maim & Mangle*?

GH: We initially started work on *Maim & Mangle* to bring a multiplayer real-time strategy wargame to the Amiga, like *Command & Conquer* on the PC. Since then it has grown into a whole lot more....

AF: How long have you been going at it?

GH: We initially started back in 1996. However, that turned out to be a failed attempt and the project was scrapped after four months or so. The current version (completely from scratch) has been going since March of 1997, and is coming along nicely.

AF: What makes *Maim & Mangle* different from all the other *Command & Conquer* clones out there at the moment?

GH: Well *Maim & Mangle* is not a straight *Command & Conquer* clone for one thing. Instead of blindly copying the features from a PC game we decided to use them as inspiration only. As many people know, *Command & Conquer* has some serious flaws that affect the gameplay and we didn't want to duplicate them in *Maim & Mangle*. As an example of *Maim & Mangle*'s unique features, we have:
– A 3D landscape which affects both line-of-sight and line-of-fire.
– Weather effects such as rain, fog, dust storms, etc..
– Night-time combat
– Multiple independent construction facilities.

On the mundane side of things, we will support:
– Save game for multiplayer games – Graphics boards (preferred) – PPC Amigas, etc.

AF: Do you have a publisher set for *Maim & Mangle*?

GH: Yes, our joint venture, The World Foundry, have signed an exclusive contract with Vulcan Software Limited. This not only means that *Maim & Mangle* (as well as our other title, *Explorer 2260*) will be published by Vulcan SW, but all the future titles that we decide to work on will be published by them too.

AF: What made you set up with Ed Collins and set *Maim & Mangle* in the same universe?

GH: Initially we (Chris Page, Ed Collins and myself) decided to share coding experience, ideas and help between us. It was then decided that the CEG (the encyclopedia for the Explorer universe) should be used as a setting for all of our games.

AF: When do you expect to have *Maim & Mangle* released?

GH: Well we cannot commit to a definite date, but we are aiming for later in 1998.











Vulcan have plenty of great games coming out soon. These shots are from *Genetic Species* and *Hard Target*.

Alive MediaSoft are another of the new games companies that seem to be springing up on the Amiga. They have a game called *Haunted* which was originally going to be published by Direct Software, but which they will now be publishing themselves.

AF: **How long have you been working on *Haunted*?**

ALIVE: It will be 2 years this summer. It actually started out as a hobby. Tired of making pictures and animations for nothing, we decided to make a game.



AF: **When do you plan to release it?**

ALIVE: Well I must admit that even if *Haunted* was ready today we wouldn't release it because of all the great games out at the moment or due shortly, like *Myst*, *Quake* and *Foundation*. When we are ready for release we will hold no bars. We are putting every penny we've got in *Haunted* with a massive glossy box, colour manuals and we're even talking to a company about having it converted into German. We have already planned a big advertising campaign. The best news we've had lately is that we may (no promises yet!) just get *Haunted*'s first official showing on national television. We are talking to a network who are considering having us guest on their show to pump the Amiga, *Haunted* and Alive in return for advertising that particular show in our adverts.





Alive MediaSoft have been working on *Haunted* for the last two years now. It should be one of the most involving adventures yet created for the Amiga.





AF: **We understand you wanted to release a version of *Doom*, but were told by id that this was not possible. Why not, and have you resolved the situation?**

ALIVE: The *Doom* situation is very touchy at the moment. Firstly, yes we have had contact with id who were not at all supportive of this project. Andrew, our publishing man, was in the midst of trying to sort out this problem when out of the blue id put a block on their email addresses so that Alive MediaSoft could not contact them! Sadly, we have also had some bad vibes from our fellow Amiga owners who, following many rumours on the net, got the impression we were trying to rip-off *ADoom* and sell it commercially. This was never our intention. We simply saw *ADoom* for ourselves and wanted to see it hit the Amiga market in a big way. We simply wanted to sell the original version of *Doom* to Amiga owners who had either got *ADoom* off the net or a magazine cover or we would supply it free of charge. We just thought Amiga owners would rather buy *Doom* from a true Amiga company like Alive, rather than lining the pockets of the likes of PC World.

We understand that another Amiga company have taken on the tricky task for themselves and we wish them a lot more luck with id than we had!

AF: **Do Alive Mediasoft have any other games up their sleeve that they'd like to tell us about?**

ALIVE: Yes, our next release is going be *Gilbert Goodmate*. This is a *Simon the Sorcerer*-type game with really excellent graphics and with a fully spoken dialogue.

We also have *Goblin Tanx*, a total chaos-and-destruction-blast-everything-in-sight-with-your-tank-type game! This now consists of 256-colour AGA graphics, CD-ROM only, fully rendered tanks and more. We'll send you more information as we progress.











Gilbert Goodmate is the next adventure coming from Alive MediaSoft. It promises to be a real grin.

PUBLISH OR BE DAMNED

If you're a budding games writer and you have an idea you think the Amiga world could do with seeing, you can contact these people with a view to publishing your game. Make sure you don't just approach them with a napkin with some scrawl on it and a half-baked idea for a *Command & Conquer* clone. Your idea should be well presented and, if possible, at least partially coded to give the publishers some idea of what you've got.

PAUL CARRINGTON, VULCAN SOFTWARE LTD. Vulcan House, 72 Queens Road, Buckland, Portsmouth, PO2 7NA tel: 01705 670269 fax: 01705 662226 email: paul@vul-soft.demon.co.uk

VINCE PIKE, EPIC MARKETING Unit 22 – BSS House Area 50, Cheney Manor, Swindon, Wiltshire, SN2 2PJ tel: 01793 490988 fax: 01793 514187 email: epicmarketing@dialin.net

RICHARD BROWN, SADENESS SOFTWARE 13 Russell Terrace, Mundesley, Norfolk, NR11 8LJ tel: 01263 722169 email: rich@sadeness.demon.co.uk

DAVID LAW, WEIRD SCIENCE Q House, Troon Way Business Park, Humberstone Lane, Leicester, LE4 9HA tel: 0116 246 3800 fax: 0116 246 3801 email: sales@weirdscience.co.uk

SOFIA TSIOTSIKAS, PXL COMPUTERS / CLICKBOOM Box 969, 31 Adelaide St. East, Toronto, M5C 2K3, Canada email: info@clickboom.com

WHAT DO I NEED?

If you don't already have the following things, these are pretty much going to be the low-end of what you'll require to play games this year and next:

68030 50MHz – '060/PPC
8Mb Fast RAM – 32Mb
4x CD-ROM drive – 8x
40Mb hard drive space – 200Mb
AGA chipset – graphics card.



The Amiga Emulator

They said it was impossible... **Simon Goodwin** reveals the truth about ***UAE***, the ***Unix Amiga 500*** Emulator, which runs on fast PCs, Macs and even Amigas...

AFCD24:-In_the_Mag-/Emulators

ON THIS MONTH'S CD

UAE emulates the original Amiga, or comes pretty close. Amigas are uniquely difficult to emulate because the CPU, though complex, is just one of four large chips that operate simultaneously, including the Copper co-processor, Blitter bit manipulator and 20-odd direct memory access channels. Programmers know, understand and use all these goodies, often in ways the original designers never expected.

Other computers lack many basic Amiga features, like sprites and dual playfields (overlaid displays), mixed modes on one screen, interacting (attached) sound channels, Hold and Modify colour and bit level access to disks. Most can be emulated, but at great cost. Scrolling two overlays in opposite directions takes the A500 mere microseconds, but requires an emulator to read, mix and write up to 100Mb of video data every second.

Tight coupling between the processors means the 68000 can program the blitter to program the copper to program the blitter, and then get on with something else. This leaves 100,000 or so graphic operations chugging away automatically every second, in perfect synchronisation at no cost to the 68000. An Amiga emulator must do all this, and more, without missing a beat.

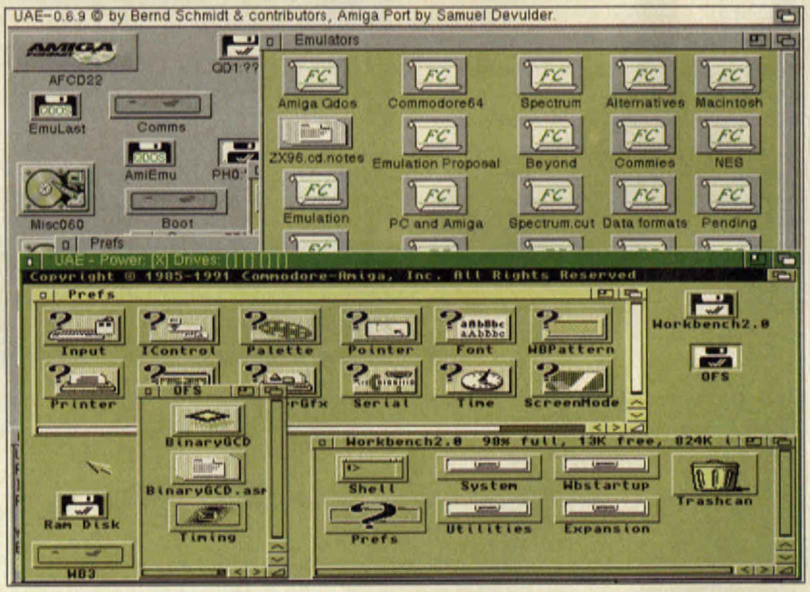
UAE originally stood for Unusable Amiga Emulator, with very good reason. Version 0.1 would not even boot! Despite this unpromising start, vintage Amiga devotee Bernd Schmidt pressed on, encouraged by former Commodore man Ed Hanway who'd written his own, non-working, Amiga emulator.

Amiga emulation is a colossal problem. The 68000 processor is complicated, but a far greater challenge lies is emulating the custom chips, which can be reprogrammed at microsecond intervals, changing colours, reusing sprites and hardware channels. The effort which is required to allow for every possibility will humble even GHz systems.

name changed to Unix Amiga emulator. It's now approaching version 0.70, runs all Commodore versions of Workbench and a fair proportion of unprotected A500 software on fast computers from most manufacturers.

UAE was originally coded in Gnu C for Linux Torvald's Linux operating system for Intel/IBM PC hardware. It's freeware, running on Acorn, Amiga, Apple and Microsoft operating systems, besides DEC, SGI and Sun Unix workstations. The Amiga port is not as mad as it sounds, as we shall see. UAE has even run itself, albeit slothfully.

Amiga UAE running Workbench 2 on a Workbench 3 window!



> *If you have a game or demo that has a lot of blitter activity, many copper or sprite effects, dual playfields and scrolling, no one can help you – **Bernd Schmidt***

The current Unix version of UAE emulates an Amiga 500 with 68000 or 68020+68881 processors and the original 1985 graphics chip set, plus larger chip RAM and 'big blits' from ECS, but none of the other enhancements of the past decade. RAM may be mapped anywhere it would appear on a real 16-bit Amiga. 10Mb of real memory is the minimum required to start most versions.

UAE can print to the 'Amiga'

UAE WEB NODES

Amiga Forever: http://www.cloanto.com/amiga/forever
Official UAE Web page: http://www.schokola.de/~stepan/uae
Another UAE page: http://www.son.wisc.edu/~paul/uae
UAE discussion: http://www.netrunner.com.br/dosuae/uaeboard
UAE links: http://www.geocities.com/SiliconValley/Bay/3211/links
Fellow Home page: http://www.ifi.uio.no/~pettersc/fellow/fellow

An accurate Amiga emulator – or even one as close as, say, the best freeware Spectrum emulators, or Fusion 2 – is a long way off. But even an imperfect emulator could be useful, and is certainly an impressive feat.

Eventually Bernd found a neat way to speed UAE up, skimping exact hardware emulation on display lines where nothing tricky happens, and the

Continued overleaf ➡

Linux

Bernd Schmidt wrote the original version of UAE on PC Linux, still the leading version. It's command driven, controlled by typically obscure parameters – a string of up to ten characters after -O (letter) picks a graphics mode, -0 (zero) selects a disk file name for the emulated DF0:, -s and -S for slow memory and sound, and so on. Not all of the combinations yield sensible results, so it takes trial and error to find a set that suits your hardware.

The UAE sources are portable but are hardly optimal. Key parts have been rewritten in Intel assembly code, boosting x86 hardware – 486s, Pentiums and compatible chips.

Now that Linux runs on phase 5 PPCs, we can look forward to Power Amiga versions.

Smart Fellow

The best argument for sticking with MS-DOS is Fellow, a DOS-specific Amiga emulator heavily dependent on Intel assembly language, written in Norway by Petter Schau. Fellow's multi-screen configuration menus are a vast improvement on UAE's command line.

For reasonable performance you need at least a 100MHz Intel processor, PCI graphics with VESA BIOS Extensions 2, and a Soundblaster. Fellow requires 11Mb RAM and prefers 28Mb. The current version 0.31 only emulates a 68000 processor, but 68030 emulation is in development.

Once you've got it started, the improved control makes it easier to get specific games and demos working with Fellow, but it's relatively fussy about the host PC configuration. A NexGen 586 fell over, reporting an illegal instruction. In a Windows 95 DOS box on an Intel PC, Fellow just presented a blank screen and sulked, apparently because of sound-card incompatibilities.

Stereo sound is an option, and the 'Sync with VGA' option attempts to synchronise Amiga display updates with the PC screen. This may eliminate flicker, but it messes up sound and emulation speed.

MS-DOS

Any Intel system that can run UAE at a usable speed will also run Linux, if you want a proper CLI, and it is probably sold bundled with most Windows packages.

However, until recently the MS-DOS port of UAE was the easiest to get started. Most PC users have access to MS-DOS 5 or later and know how to type commands there.

The best that can be said about MS-DOS is that, unlike Windows, it doesn't drain performance just by being there – but because of the many configuration possibilities, and the great risk of clashes, mean you're going to be very lucky if emulation works first time.

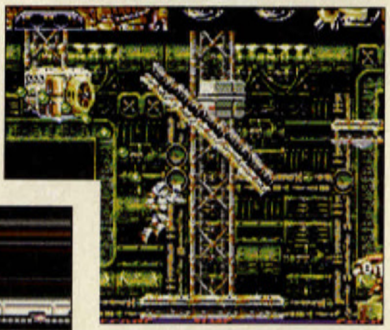
The latest version of MS-DOS embedded in Windows 95 is not fully compatible, either.

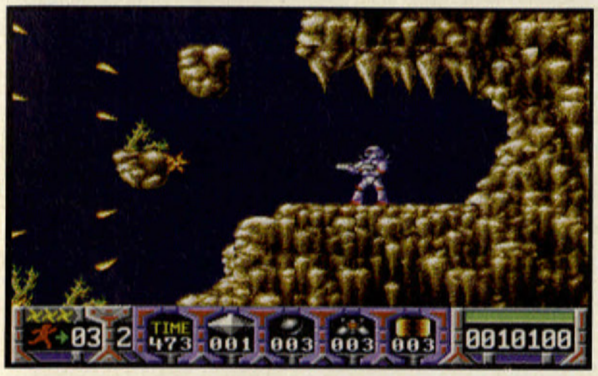
⬅ parallel port. It emulates mouse and joystick controllers, perhaps via the numeric keypad. It can generate and use hard disk images in files on the host system. It emulates floppy disk drives using 880K disk files. Only the Amiga port can read Amiga disks directly. The others require ready-made .ADF files from CD or Internet or made on a real Amiga using the TRANSDISK utility.

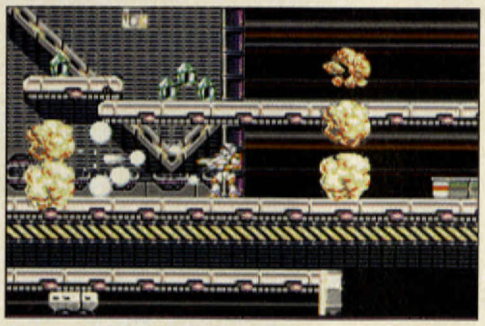
The long-awaited PC version of Catweasel, the only modern disk controller in the mould of the Amiga's Paula chip, may change this. For now, UAE can't properly emulate the Amiga floppy disk hardware because other computer floppy controllers lack the required bit-by-bit control. Protected A500 programs are inaccessible.











Turrican runs, but is very slow in places, even on a Sparc 5.

UAE GRAPHICS

UAE runs best on an 800 by 600-pixel screen with 16-bit colour, into which it can map all the OCS modes.

It works by generating one image containing the entire Amiga display, mixing sprites and playfields together and adjusting colours, position and resolution for Copper effects. However, colour conversion, mixing and masking all take their toll.

Your initial choice of mode is vital because UAE cannot change the physical mode after it's started, though it can map Amiga mode changes into the available space. 800 by 600 covers the full range of possibilities, including interlaced hi-res overscan, automatically flicker-fixed on PC monitors.

Part of the screen will be blank in this mode, but VGA and Mac 640 pixel

THE UAE POSSE – UAE-COMPATIBLE SYSTEMS AND DEVELOPERS

Acorn RISC	Peter Teichmann <sol@space.wh1.tu-dresden.de>
Amiga, pOS	Samuel Devulder <devulder@info.unicaen.fr>
BeBox	Christian Bauer <bauec002@goofy.zdv.uni-mainz.de>
Linux	Bernd Schmidt <crux@pool.informatik.rwth-aachen.de>
Macintosh	Ernesto Corvi <someone@imagina.com>
MSDOS	Gustavo Goedert <ggoedert@netrunner.com.br>
NextStep	Ian Stephenson <ians@cam-ani.co.uk>
OS2, XFree86	Krister Bergman <bellman@kuai.se>
PowerMac	Arnaud Blanchard <jblancha@pratique.fr>
Windows 32	Mathias Ortmann <ortmann@informatik.tu-muenchen.de>

Windows

Versions of UAE optimised for 32 bit Windows are favoured by Amiga Forever, a CD release bolstered with Workbenches and Kickstarts from 1.0 to 3.0, licensed to Cloanto by Gateway 2000, *Personal Paint 7.1* and AExplorer, which allows Window users to browse through files on a serially-linked Amiga.

Amiga Forever is a commercial product for Amiga nostalgics loath to copy or steal Kickstart and Workbench. It has a neat browser-based front end, much background information about the Amiga and some sampled Amiga speech. You still need command-line parameters to fine-tune the emulation.

A fast Pentium delivers two or three times the CPU speed of an A500 and runs more than half the available software for Amigas from vintage A1000s to accelerated A2000s with WB3 and a video card. Sound and graphics imperfections show up now and again, but many old games, demos and serious programs run perfectly – at times, you can forget you're using a PC. Even when programs won't run, UAE normally falls over in an authentic Amiga-like manner, with Windows grinding along unperturbed in the background.

Cloanto's initial CD release was stylish but flawed. The automatic installers for UAE and DirectX failed with cryptic messages and the DOS UAE drawer was empty apart from a key file for the encrypted ROMs. Four out of five of the Windows 95 and Windows NT systems I tried initially rejected the CD because it contains long file names which Microsoft only recently deigned to support. The standard MSCDEX driver prevents access to such files, and only later versions of Win95, outlawed by US courts, are smart enough to comment out the redundant line in CONFIG.SYS.

Later versions will be tidied, gaining a startup floppy, TCP/IP networking and audio interviews with visionary Amiga designer Jay Miner. Help and updates are already available to registered users, via Cloanto's web site.

Amiga Forever demands a Pentium with 16Mb RAM, Windows 95, 98 or NT and HighColour display. It's most impressive on a fast system, especially in Picasso96 modes which turn the PC graphics card into a full Amiga RTG system, with megapixel displays in true colour.

Amiga

UAE was first ported to Amiga by Olaf Barthel. Development continues thanks to Samuel Devulder, who's A500 with GVP030 runs it at perhaps a tenth of full speed and takes the best part of a night to recompile each version.

The Amiga version goes a very long way round, decoding and interpreting CISC instructions it could run directly, but that brings great benefits in compatibility. UAE can trap errors that would crash a real Amiga, simulate RAM or ROM memory anywhere and retarget graphics to any display, so you can view sprites, scrolling, dual playfields, copper fades and other custom candy even on a Zorro graphics card – albeit rather slowly if you try all these tricks at once.

On a 50MHz 68060, Amiga UAE averages 50 to 75 per cent of the CPU speed of a real A500 with fast memory. That's usable, and twice as fast as the Mac version under Fusion. Graphic updates are relatively slow, at least on AGA, and sound, whether directed to Paula or AHI, lags far behind real time.

Amiga UAE is command-driven like the Linux original and requires IXEMUL, virtual Unix emulation which doesn't help speed or ease of use. It can read real Amiga floppy disks or partitions, albeit selected with Unix syntax. It's not very stable on my 68060, but apparently it works fine for others.

Amiga UAE has an ARexx port which provides a GUI while it's running, via MUIREXX. This lets you toggle features and insert and remove virtual disks. Amiga UAE has a screen mode requestor and works best in HAM6 mode as HAM8 gives a blank green screen. Lines flash across the screen during HAM updates . These are negligible on Workbench, but intrusive on some demos.

Lower colour modes are usable, even ECS and EHB modes, but give only approximate colours. Aminet's *PatchWPA8* speeds up output which can be saved to a file and played later at full speed, including sprite and copper effects that would otherwise be impossible to grab.

Amiga UAE even opens on the Workbench if you select no mode, but you need a high-colour graphic card Workbench for full colour.

widths are too narrow for an entire overscan screen. Low resolution 320 column mode is much faster and is adequate for some games and demos.

Scrolling and screen-dragging are supported, but work by redrawing the entire screen, making them slower and less smooth than the real thing.

Workbench sprites and icons flicker slightly as they are moved because the Kickstart beam avoidance code cannot work. This is because the emulated display is not scanned at the original rate, and real Amiga programs rely on exact synchronisation which UAE simply cannot deliver.

LIMITATIONS

If you lack the 16-bit colour mode needed to render the entire 4096 colour OCS palette, UAE uses dither patterns to approximate the result. This is generally OK for graphics, but makes text hard to read. UAE can also skip pixel rows or columns to fit a lower-resolution screen, sacrificing clarity.

UAE has some major limitations. Collisions between sprites and the background are not detected. This means players or bullets may slide blithely through walls in some games, for instance. Programmable beam modes like ECS productivity and SuperHi-Res are not supported and timers yield inaccurate results. Serial port code is faulty, ruling out comms and MIDI. Mouse movements lag, and keys don't always work as expected.

Undocumented gaps upset many programs, especially hardware-banging demos and Jeff Minter's games. Jesus on Es did not work but many other demos did, including most of the Assassins PD games collection, ready-converted into ADF files on Epic's Amiga Emulator CD.

> *"For those who still have and treasure their A1000 (I do), Amiga UAE is not an alternative – Olaf Barthel"*

UAE SOUND

UAE sound is mono and extremely CPU-intensive. Even a 200MHz computer struggles to keep up, with gaps or glitches when other work must be done. The 'popcorn' music on the Assassins disk menu regularly missed beats on a P200 with MMX. Reducing the sample resolution and rate did not cure this. Simple in-game effects were generally OK, though the Boing demo generated obvious clicks absent from the original.

UAE can't fix the compatibility problems of old Amiga programs, though it can emulate many hardware configurations. Some programs require a particular Kickstart, chip RAM size or trapdoor expansion or else they'll crash, just as they would on a real A500, if UAE is not set up to suit. At least you can restart with new parameters, without having to dissect your computer to change the configuration.

FLOPPIES

Amiga floppy disks can only be accessed after converting them into 880K 'disk image' files. Only Catweasel or the Paula

Apple Mac

We tested the 68K version of UAE under Fusion 2, and more up-to-date PPC versions on Power Macs, all with Mac OS 7.5. The Mac port is relatively slow, but stable and friendly, with menus to change disks and tweak the display update rate from 1:4 to 1:16. It works on 8, 15 or 24 bit colour desktops. Options bypass Quickdraw and Amiga GfxLib, giving more speed at the expense of compatibility.

The Command key emulates the missing right mouse button, while PgUp and PgDn stand in for the Amiga keys. You can share files between Mac and Amiga in a folder, seen as HD0: by UAE. Mac UAE sound is a CPU hog and fussy about hardware; Fusion remained mute, though sound was enabled and other Mac sounds played OK. An old PowerMac 6100 ran Amiga Qdos at about the speed of a real QL, and with a bit of tweaking is could even read DD disks.

Continued overleaf ➡

UAE VERSIONS

We've tested the four main versions of UAE, for Linux, Microsoft/Intel systems, Apple Macs and genuine Amigas. The Speed Table compares Power PC, Intel and 68K systems, from A500 to A4000/060, with and without UAE. Two short tests assess CPU emulation. BinaryGCD finds cryptographic factors (Knuth, Vol. 2 page 321) while Twister rotates small bitmaps through 90 degrees. Times are in seconds for one million operations.

Real A500s are fastest when using few colours or expanded with real (not trapdoor) fast memory. The A500 fast timings reflect such a system.

By default, extra colours or pixels reduce speed to 75 per cent in HAM6, EHB or MagicWB modes, and leave just half that in the worst case, 16-colour HiRes: A500 Slow.

TABLE: CPU EMULATION SPEED

System	CPU	MHz	UAE	BinaryGCD	Twister
Fusion 2	68060	50	0.6.0	1990	325
Linux PC	Cyrix 486	66	0.6.9	1801	340
A500 slow	68000	7.2	none	1290	295
Performa	PPC603e	100	0.6.9	1408	227
A4000	68060	50	0.6.9	920	172
A500 fast	68000	7.2	none	475	125
Mac 8600	PPC604e	200	0.6.9	447	93
Win95 PC	Pentium MMX	200	0.6.9	214	41
A4000	68060	50	none	10.1	2.1

chip in a real Amiga can do this. Even then, there's no support for 'non-DOS' formats like protected disks, Diskspare, HD and ED floppies.

TRANSDISK is a trivial program to copy a disk from DF0: to standard output, which you must redirect to a file unless you enjoy watching 900,000-odd bytes of scrolling gibberish. The superior PD *TrackWiz* transfers both ways. With only a standard drive, the image requires compression or splitting to fit MSDOS disks.

You'll need ZIP for Amiga, LHA for PC, or some similar combination to pack and unpack the results on 720K floppies for transfer to the emulating machine. Fast serial links and high density 1.44 Mb floppy drives help.

> *Many old games, demos and serious programs run perfectly – at times, you can forget you're using a PC...*
> *Simon Goodwin*

UAE is useless without at least one disk image and a half megabyte Kickstart ROM image from a real Amiga. A few demos that ignore Kickstart may run using minimal 'hook' code provided in the absence of genuine, copyright, ROM code. The only legal way to get Kickstart on UAE is to run *TRANSROM* to save it from a real Amiga, or buy the Amiga Forever CD which includes a set of ROM images from Kickstart 1.0 to 3.0.

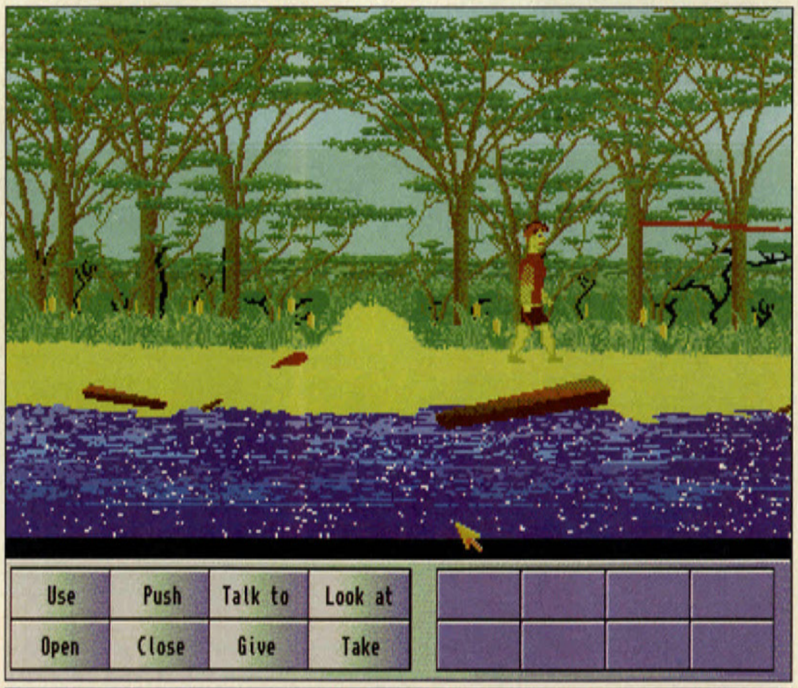
ASSESSMENT

Bernd Schmidt is not a traitor but rather a real Amiga enthusiast and he's demonstrated a detailed and sensitive understanding of the Amiga in making UAE work. There's a risk that ignorant users of other computers will assume that since UAE is available, they can do anything a real Amiga can. This is nonsense. UAE runs some old games, demos and system-friendly applications at rather low speed, which may be all some early abandoners got out of their Amigas, but is a fraction of the potential enjoyed by Amiga users this decade.

UAE is not the Amiga's death knell, but a tribute to the original model of the mid 1980s. UAE emulates a vintage A500 with CPU expansion and even then it has gaps. Full A1200 emulation is barely conceivable – the best way to run Amiga software will remain a real Amiga for the foreseeable future.

UAE is still potentially valuable to modern Amigans. It's a way to run old programs on modern systems with very different CPU and graphics, without resetting into compatibility mode. It can demonstrate Amiga programs on other platforms. As the most complex and demanding emulator around, it acknowledges and highlights the unique Amiga design.

And, in the best Amiga tradition, its a seriously clever hack!



***Parrot Island*, rendered on a 256-colour Sun display.**

CD RESOURCES

AMIGA EMULATOR CD (PD in ADF format) Epic Marketing, 01793 414188, £14.99.
AMIGA FOREVER – CLOANTO (dist. Epic, HiSoft, Power, Weird Science, etc) preview v1.0 £19.99, v2 £39.99 (when ready).
AMIGA CLASSICS (40 full games, KS1.3) Epic Marketing, 01793 414188, £14.99.
***AFCD24* – PC, Mac & Amiga UAEs + sources, Fellow, TrackWiz, ADFs, more!**

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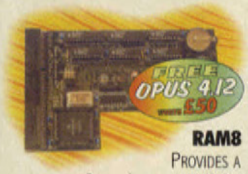
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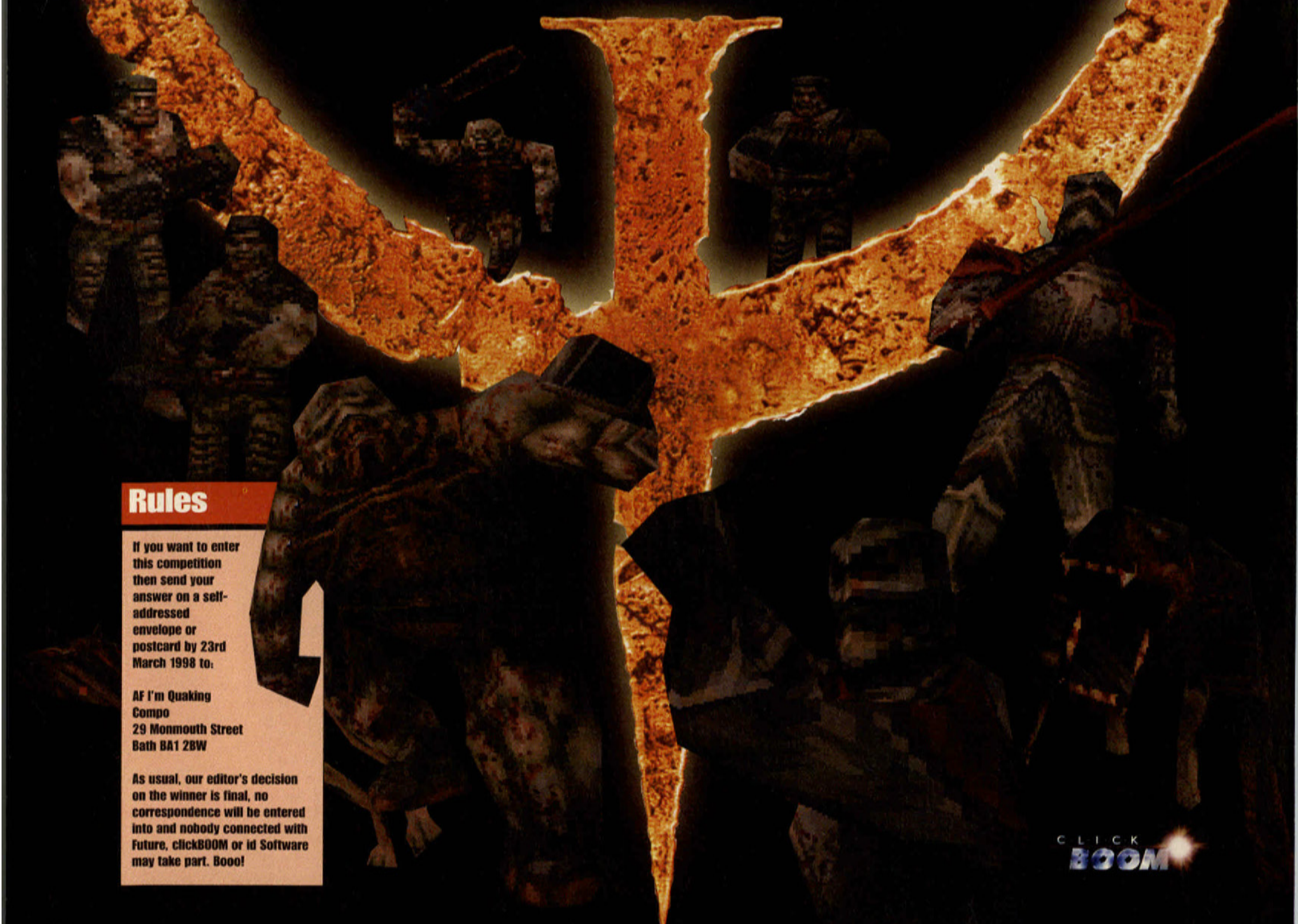
AF Competition!

QUAKE AMIGA

How would you like to win one of ten copies of the most eagerly awaited game for the Amiga, ever?

You can win a copy of Quake Amiga just by answering this simple question:

What is the name of the scale that is used to measure the strength of earthquakes?



Rules

If you want to enter this competition then send your answer on a self-addressed envelope or postcard by 23rd March 1998 to:

AF I'm Quaking Compo
29 Monmouth Street
Bath BA1 2BW

As usual, our editor's decision on the winner is final, no correspondence will be entered into and nobody connected with Future, clickBOOM or id Software may take part. Booo!

CLICK BOOM

SCREENPLAY

GAMING SPECIAL!

The latest games, the handiest hints and some clever programming from you!



What a great month for games. Not only have we been able to get our hands on the awesome *Doom* and *Myst* but several other games, not quite so well known, have plopped onto the office doormat this month. And it's not like the current glut is about to stop. Check out this month's Previews section for news and pics of the mighty *Quake* – that's gonna be something worth waiting for. Unlike *Championship Manager 2*. After at least a two year wait, when the game finally arrives it proves itself to be complete and utter rubbish. Read the review, it should give you a giggle! Enjoy...

Andy Smith

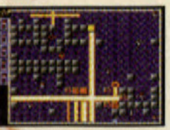
AMIGA FORMAT'S REVIEW POLICY

WHAT OUR REVIEW SCORES MEAN

Every month we scour the world's software houses for the latest and greatest Amiga games. We try to ensure we keep you as up to date as possible and we'll stop at nothing to bring you the best, definitive, no-nonsense reviews of the games that matter.

90+%	The crème de la crème. Only the very best, most playable and original games are awarded an AF Gold – the most highly prized rating there is.
80-89%	These games are very good, but due to minor flaws are not the finest examples of their genre.
70-79%	Good games which are worth buying, especially if you have a special interest in a game type.
60-69%	Average releases with somewhat limited gameplay and appeal. Games in this category tend to be flawed.
50-59%	Below average games which are unlikely to impress your mates or your wallet. Avoid.
40-49%	Overwhelmingly poor quality games with major flaws and appalling gameplay.
Under 40%	The absolute pits.

Previews





GAMING SPECIAL!

Andy Smith tries to decipher the message coming from the jungle drums of the Amiga gaming community. As you can see, big news is breaking...

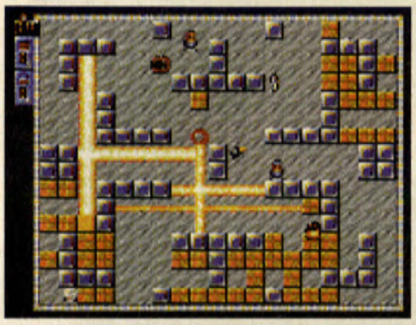
Mega Blast

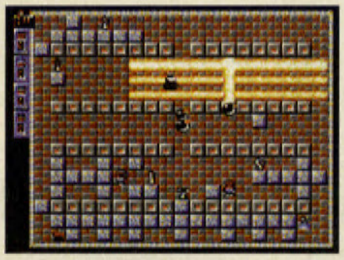
Mega Blast	£TBA
Release Date:	TBA
company:	Islona
email:	?

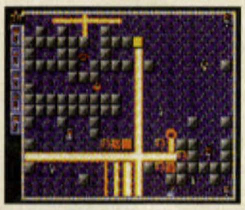
Coming soon on the Islona label is a clone of a very different game to *Quake*, but one almost as popular – *BomberMan*. This is a highly addictive and thoroughly enjoyable multi-player game in which each player (there can be up to six, human or computer-controlled) controls a small character who runs around the game area dropping bombs in an attempt to blow up the other players and at the same time trying to grab the diamonds that are scattered around.

The graphics and levels are simple, but the biggest hook is the sheer playability of the thing. Hopefully this has survived the transition from SNES to Amiga and we'll be reviewing this as soon as we can.

When we do, we'll be able to pass on some price and release date information too – sorry folks, but if Epic don't know yet then they can't tell us and we can't tell you!









Bombing action in Mega Blast. Chase the other players, drop bombs to blow 'em up and then run around and collect all the diamonds. The action promises to be frantic.

Gilbert Goodmate and the Mushroom of Phungoria

Gilbert Goodmate	£29.99
Release Date:	Autumn
company:	Alive MediaSoft
email:	stevenalive@innotts.co.uk



Gilbert gets to chatting to the local population of Phungoria. Little do they know about the lost mushroom.

Coming in the autumn from Alive MediaSoft at a cost of £29.99 is this new graphic adventure developed by Prelusion.

The game revolves around Gilbert's attempt to find a magic mushroom that's been stolen from the city of Phungoria's museum a week before the annual Mushroom Festival. Now because this 'shroom's a bit special, the mushroom's guardian has been chucked in jail for allowing it to be stolen and is due to be executed during the festival. The mushroom's guardian is none other than Gilbert's grandad, so it's curtains for him unless Gilbert can find the missing fungi.

Prelusion have concentrated their efforts on the gameplay in *Gilbert Goodmate* and reckon they've come up with a very intuitive user interface so playing should be simple, leaving you to concentrate on what they promise is a very entertaining storyline.

The finished game is going to feature some 35-40 beautifully hand-drawn locations, digitised speech for every character and some 4,000 frames of animation.

We've played an early demo of the game and can confirm that it not only looks good but plays well too. The humour is definitely there so we're looking forward to putting this through its paces properly in a forthcoming issue of *Amiga Format*.



Hopefully Gilbert's mate Elton will help him out.

AF Competition! Win a DigiBoy!

Here at *Amiga Format* we've got 10 marvellous Gametech Digiboys up for grabs. These keychain games (about the same size as a Tamagotchi) feature some 55 games. Numbers 1-14 are variations of a game called *Snake* where you use the direction buttons to guide the snake around the small LCD screen towards power pills. Each power pill causes the snake to grow making it harder for you not to crash into the edges of the screen and die. Games 15-28 are variations of a game called *Turbo* where you have to steer your sports car left and right to avoid the oncoming traffic.

Repel the alien invasion in games 29-42 in variations of a game called *Galaxia*. Move your spaceship left and right and blast the little suckers that come down the screen.

Finally there's *Block Game*. Yes, it's a *Tetris*-alike where you have to make solid lines at the base of the screen by manipulating the falling blocks. There's hours of fun to be had from one of these, and they're great to annoy people on the bus with because they've got sound and everything! To win one of these lovelies, simply send in a postcard with your name and address on it. The first 10 picked from the office hat (Ben's) will win and the closing date to get your postcards to us is March 20th, 1998. One entry per household please. The address to send your cards to is:

55 Ways To Miss Your Stop, Amiga Format, 30 Monmouth Street, Bath, BA1 2BW.

The Japanese Keychain Company, who are responsible from bringing us DigiBoy, can be contacted on: 01302 830515.



Quake

Quake . . . . ETBA
Release Date: . . . . Imminent
company: . . . . clickBOOM
email: . . . . info@clickBOOM.com

Canada's finest software house have nearly done it again. After bringing us the wonderful *Myst*, clickBOOM are just putting the finishing touches to another of the biggest games to hit the PC in recent years – *Quake*.

Everyone and his wife must surely know that this is the follow up to the genre-setting and ground-breaking *Doom*, but with more monsters, bigger levels, better weapons and more blood. Well, a little bit more anyway.

Quake has astounded the PC gaming world because, even more so than *Doom*, it's such fun to play when you're networked. Not only is the game fast and smooth, which is no mean feat considering the stunning visuals, but it's the perfect medium for players to get really, really, competitive.

Watch out for the full review of the game next month (hopefully) when we'll also be bringing you news of *QuakeWorld* which will be released at the same time.

That's intrigued you, hasn't it? Don't ponder too long though, just enjoy these screenshots and wipe that dribble from your mouth...



It's very dark and it's very scary. Never play Quake in a darkened room – it'll give you nightmares.



This handsome chap here is about to find out what it's like to be on the receiving end of a shotgun.









The blood flies in Quake. Just make sure it's someone else's and not your own that's flying.

QuakeWorld

QuakeWorld. . . . . ETBA
Release Date: . . . . Imminent
company: . . . . clickBOOM
email: . . . . info@clickBOOM.com

Being released at the same time as *Quake* is an Internet, multi-player-specific version of *Quake*, called *QuakeWorld*. While the original version of *Quake* can be played over the Internet, many players found it less than satisfactory.

Symptoms like excessive lag (actions happening much later than when you actually performed them) and packet loss (the game would freeze and then resume several seconds later) amongst others made the whole *Quake* experience something of a disappointment.

Realising how many people played *Quake* on the Internet and how many would have liked to but couldn't because these problems made the game so poor, John Carmack of id Software created a version of *Quake* that was optimised for average modem Internet players.

This Internet-specific version only allows you to play Deathmatch games over a TCP/IP network like the Internet. There's no facility for solo play and you must first connect to a special server.





QuakeWorld speeds up your Internet playing.

Now into its second generation, *QuakeWorld* has be sculpted by countless hours of user feedback and tweaking to provide the best multi-player experience that can be had from the equipment which the average gamer will have. So if you're after a decent game of *Quake* over the Internet, you should point your browser at: http://www.quakeworld.net/main-quakeworld.html

This site has more information and contains all the necessary files you'll need to download.





More death, more destruction and more scary dark places to get lost, in the Internet-specific QuakeWorld.

And there's more!

Islona have also lined up several other games, details of which are very scant at the moment. And, I'm sorry to say, I don't have any screen shots to show you. But just to keep you up to date anyway, I can let you know that you can soon (well, soon-ish really, programmers do tend to work on a different time scale to the rest of humanity!) expect to be playing:

TOTAL COMBUSTION. Billed as a *Carmageddon* cum *Interstate 76*-type game, you can bet this one's all about driving cars. I bet there's some wanton destruction in there too.

TESTAMENT 2. Now this one really should be very good. The first *Testament* was good enough to earn itself a *Format* Gold award, so it's mouth-watering to think there's more of the same (but different) to come.

CLAWS OF THE DEVIL. This one's an action adventure that they reckon is a cross between *Tomb Raider* and *Resident Evil*. Now those two PlayStation games are pretty spectacular, so *Claws of the Devil* has got a lot of living up to do. Only time will tell...

EVIL'S DOOM. No prizes for guessing that this is a *Doom* clone. Ahem.

HOTEL MANAGER. A hotel management sim! Just like the good ol' days. Actually, Bullfrog managed to do rather well with a couple of resource management games (*Theme Park* CD reviewed next month) so there's no reason why this one shouldn't be a lot of fun too.

And lastly, though not strictly a game, is ADVENTURE SHOP, a powerful graphic adventure creator for budding storytellers to tinker around with.





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Pinball Brain Damage

GAMING SPECIAL!

He's no wizard but there's definitely a twist and yes, our Andy Smith has such a supple wrist...





Those two glorious tables in, er, all their glory. You can see the whole table like this if you play in Super HiRes mode, you'll be pleased to hear.

There are two schools of thought when it comes to designing computer pinball games – use the 'virtual' environment of the computer to build a table that you wouldn't be able to build in the real world, or simply try to get as close to a real-life table as you possibly can through good design and programming. Both of these schools of thought are right and *Pinball Brain Damage* is from the second. Fair enough.

Arguably the most important thing about a pinball simulation is the actual ball movement. Far too often we see pinball games that just don't have the right 'feel'. The balls are too light, they don't come off bumpers properly and they do crazy things for no apparent reason.

Ever since the *Pinball Fantasies* and *Pinball Illusions* games appeared, where the ball movement was spot on, this has become even more apparent. Score two for *Pinball Brain Damage* then, because the programmers can't be faulted for their ball routines.

The game designers need a couple of slaps on the wrist though. For a start there are only two tables, a car driving-type thing and some kind of wacky science lab affair. Each table can be viewed in HiRes mode where half of the table is shown at any one time and the screen scrolls to follow the ball as it moves around, or in Super HiRes mode where the whole table is visible. Just. If you've got a magnifying glass.

> **"Two tables should be enough, but in Pinball Brain Damage they're pretty dull..."**

Two tables should be enough, but in *Pinball Brain Damage* they're pretty dull affairs. Sure enough, there are ramps and tunnels to hit, but they don't do a great deal when you do hit them. There aren't even that many targets around the main table to go for. As for getting the multi-ball mode to activate, well you'll have to be a dedicated pinball fan with better than average skill on the flippers to ever see it.

PBD looks about as good as you'd expect, it sounds wonderful but it's just not as much fun to play as some of the earlier pinball games that have been around for years. A good effort, but it's not taking anyone's crown.





(Top) Playing in HiRes mode. (Below) And the other table in Super HiRes mode. Boy, scintillating eh?



PUBLISHER: Epic Marketing (0500131486)
PRICE: £19.99 (CD or floppy)
VERSIONS: A1200
REQUIREMENTS: 1.9Mb Chip Mem
RELEASE DATE: Out now

GRAPHICS: ●●●○○
Very nice. Smooth scrolling and Super HiRes is good. More could've been done though.

SOUND: ●●●●○
The driving tune is fab and the sound effects are very cartoony. A lovely sounding game.

ADDICTION: ●●●○○
Not as addictive as you'd expect. The high level of skill required to make anything exciting happen will put a lot of people off.

PLAYABILITY: ●●●○○
Practice makes perfect and there's no point making the game ridiculously easy, but too much time is wasted watching a ball go round a table hitting nothing.

OVERALL VERDICT:
A better than average pinball game but not one that's re-defining the genre at all. Oh, and there's a bug too. Tilt the table just after the ball disappears off screen when you've lost it and you won't get any more. Not nice.

67%

GAMING SPECIAL!

We're all DOOMed

It's finally here! Nick Veitch looks at one of the most eagerly awaited games in Amiga history...

ON THIS MONTH'S CD AFCD24:-In_the_Mag-/Doom





It was Boxing Day, and all over the Internet, nothing was stirring. Except that is, in the download folder of id Software's website. For it was there that they posted the complete UNIX source code of the Shareware version of their first really big game – *Doom*.

In a flurry of coding activity, half a dozen or so Amiga programmers around the world set upon the task of porting the code to the Amiga. The first was finished just six days later.

And so now the Amiga world can play the most famous first-person perspective combat game in the world. It is no longer a case of a game being *Doom*, but on the Amiga – this really is *Doom*.

> "What is a surprise is how well it actually plays. On our office '060-based A4000 with a Cybervision card it really flies."

More than a port

There is something really surprising about these *Doom* ports. It isn't terribly difficult to translate UNIX code so it will run on the Amiga, though fair play to those who have put in the effort to do it. The fact that *Doom* runs isn't that much of a surprise. What is a surprise is how well it actually plays. On our office '060-based A4000 with a Cybervision card it really flies. You get thirty frames a second at full screen resolution and that isn't just playable, that's bloody fantastic.

It remains playable on a more modest system, although if you think you're going to be able to play it on a standard A1200, think again.

Doom is a very demanding game, and the most challenging aspect is having to render all those polygons on screen – there's a lot of calculations going on there.

To compound the problem, this is one of those annoying games which will always run better on a chunky graphics system, hence the dramatic speed increase when run on a graphics card. But the Amiga programmers who have created these ports have done an astounding job and a nod of thanks may also be directed towards Steffen Haeuser, programmer of *RTGmaster*, which is used by some of the software.

Some of the ports also rely on the ixemul library. This is a library which emulates some UNIX functions, so it's obviously been used to take care of the bits of code which haven't been translated fully to the Amiga.

While it works, it isn't very elegant and almost certainly makes these ports slower than they could be. It will also take up a fair amount of memory, which isn't handy if you are trying to scrape together all you've got to run this game.

What it boils down to is that if you have a fast '030 and a reasonable amount of RAM, you will be able to play this game.

As with many of the *Doom* clones which have appeared on the Amiga, if your machine isn't fast enough then there are things you can do to make the game run at an acceptable speed. The first and most obvious is to reduce the screen size.

Doom will allow you to scale from the full-screen size of 320x200 down to the postage stamp dimensions of 97x49. Amazingly, although monsters at a distance can be quite a problem, it is still possible to play it at this size.



Yup, that's a very big gun indeed, but you're going to need it because everything is out to get you...

The other side of Doom...

Deep in the past, during the period known to games archaeologists as the Wolfenstoneage, the first-person perspective combat game genre was created. Well, actually, it really existed ever since 3D Monster Maze on the ZX80, but that's another story.

The game which rapidly became the most popular example of this genre (which is called a "corridor game" in the USA) was id Software's Doom.

With its subtle blend of violence, mayhem, devastation and big weapons, Doom became a big hit. Unfortunately, although id Software made versions of Doom for the PC, the Mac, the PlayStation, SGI and even UNIX machines, they never produced an Amiga version.

Of course, many Amiga games companies saw that they could make a killing if they could produce Doom, but on the Amiga.

The result has been a variety of some quite ingenious games, including Gloom, Breathless, Deathmask, the very popular Alien Breed 3D and its sequel, and last year's top-scoring game, Nemac IV. All these games had their strengths and weaknesses, but could they surpass the original?

Well, broadly, the answer is no. Mostly, this is due to all the Amiga Doom-clones being written for lower specced machines. There wasn't much point in bringing out a game that only a few people with '060s could play (bear in mind, when most of these titles were written, an '060 cost big money).

Doom was written to run on a 486 PC, so the likelihood of it running at anything approaching a reasonable speed on an '020 is on the slim side of anorexic.









The Doom ancestors on the Amiga (above, from left to right): Gloom, Alien Breed 3D 2, Nemac IV and Breathless. However, none of them can really compare to the real thing.

DOOMed!

Another option is to reduce the details, which makes everything appear a bit blocky. As it doesn't actually make things any easier to see, you are probably better off going for High Detail mode in a smaller screen.

Attempting to play this game with anything less than an '030 and 8Mb RAM is a little foolhardy, and it may well result in severe frustration.

More than one

As if all this wasn't gobsmacking enough, there is another thrill in store. Many of the Amiga ports also support TCP/IP network play! That means you can take on your chums in a deathmatch or co-operative game, and settle those arguments once and for all.

We have only been able to test this option with *ADoom* over an Internal Ethernet network, so we don't have any idea how it will play across a phone line. Not terribly well, we suspect. On our direct network, the game proved to be a little sluggish, but future revisions should speed up netplay.



That old favourite, the sawn-off shotgun – ideal for all your violent and aggressive needs.

More than a demo

As mentioned at the beginning of the text, the port is of the Shareware version of *Doom*. This means that you can download the Shareware Doom.wad file from just about anywhere and start playing.

However, the Amiga ports here will also work with the genuine release version of *Doom*. All you need is a registered .wad file and then you can play.

The only way to get a registered file is to buy a copy of *Doom*. This isn't too much of a problem as it is out on budget for the PC, priced £9.99. You can also get *Ultimate Doom* and *Final Doom*, which are out on budget on the "Replay" label (make sure you have a CD-Drive first as these versions are all PC CD-ROM).

If you do buy one of these versions, please make sure you fill in your registration card and put down your processor. You'd better put Amiga in front of it just to make sure they aren't confused!

All the commercial game .wads should work with any of the Amiga ports of *Doom*, although we have only tested *Ultimate Doom*. If you can't find *Doom* in your local shops, you may find that some Amiga companies will be selling the PC version by mail order pretty soon.

More than one game

Buying a commercial version of *Doom* also means you can play many of the Freeware .wads created by other *Doom* users. The PC has long enjoyed a custom level-designer for *Doom*, and the result is that there are literally thousands of custom levels available to download from the Internet. Obviously, as these are home-grown efforts, the quality varies, but it has to be said that some of them are quite tremendous.

If you have Internet access, there are plenty of web sites where you can find collections of wads. The best place to start is id Software's page at http://www.idsoftware.com.

Although they don't have a great deal of *Doom* related material on their site, they do have a well maintained links page which can point you in the direction of many sites which contain little else.





Network play means you can kill your friends (top) or you could just blast the big pink fiends (above).



One of the best ways to run Doom on a lower specced machine is by using a smaller screen.

About the Dooms:

AmigaDoom: This was one of the first Amiga ports to appear and it is quite robust and has many features, even though it's not the fastest of the emulators available.
Author: Philipp Grosswiler
Web page: www.dtrance.ch/doom

AmiDoom: Fairly similar in terms of features to AmigaDoom, it runs slightly faster on some systems.
Author: Marcus Geelnard
Web page: www.etek.chalmers.se/~e4geeln/amidoom

ADoom: Currently the best of the bunch in terms of features and speed and it even supports music! This is the first port we came across, and the one which has been updated most regularly. Top marks!
Author: Peter McGavin
Web page: Updates via Aminet

DoomAttack: Although it doesn't perform well on an '060, this port seems to be the fastest for '030-based Amigas. Still has a few bugs.
Author: Georg Steger
Web page: Updates via Aminet

PsiDoom: No graphics card support and it's a bit fussy, but it works! Doesn't require anything other than a wad to run.
Author: Kalle Sandström
Web page: www.xgw.fi/~psilon/doom.html

VDoom: Based on ADoom0.3, this is the first Doom to support the phase 5 PPC boards. Unfortunately, we couldn't get it to work reliably.
Author: Frank Wille
Web page: Updates via Aminet

Check out: http://surf.to/adoom for all the latest Doom news!



The other side of Doom...

	ADoom	Amidoom	AmigaDoom	DoomAttack	PsiDoom	VDoomPPC*
VERSION TESTED	0.8	0.5	1.10 -58	0.5	0.5	0.1
MUSIC	yes	no	no	no	no	n/a
SOUND	yes	yes	AHI req'd	yes	AHI req'd	yes
JOYSTICK	yes	no	yes	yes	no	n/a
MOUSE	yes	yes	no	yes	no	n/a
ECS	yes	yes	yes	no	no	yes
AGA	26 fps†	18 fps†	yes	12 fps†	yes	yes
GFX CARD	30 fps†	14 fps†	yes	12 fps†	no	yes
IXEMUL	no	yes	yes	no	no	no
NETPLAY	yes	yes	yes	no	no	n/a
MIN.REQ	WB3,020	WB3,020	WB3,020	WB3,030	WB3,020	WB3 PPC
	8Mb RAM	6Mb RAM	8Mb RAM	8Mb RAM	8Mb RAM	10Mb RAM

† Where possible, display speeds are given as tested on a 68060 in full-screen, high-detail mode.
* Vdoom wasn't terribly stable in this version, so many features are untested.

All You Need For Internet And Comms!

netconnect v2

NetConnect v2 is even easier to connect to the Internet! Launch the new Wizard GUI, choose your modem, enter a few user details and let the Wizard do all the rest for you! Simple! With version 2 you don't even need to worry about the provider - everything is automatic, everything is point and click! ***Amiga Format*** concluded about **NetConnect v1** (June 97 issue): "Almost the perfect package for the Amiga Internet user", "If you need to get online, this is the easiest way to do it" and "It's good value for money too - especially the bundle including the 33.6K modem." We have listened to our NetConnect v1 users, noted their comments and added some other new features.

10 Commercial Programs within NetConnect v2!

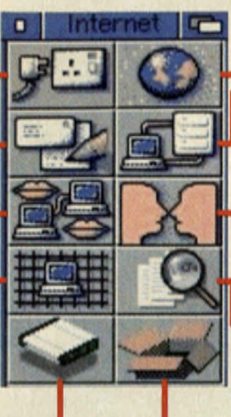
AMITCP-GENESIS
NetConnect v2 users will be the first people to use this new TCP stack! Based on AmiTCP Pro, we have added a number of changes - new Wizard, MUI based dialler, multi-user support, 'events' control, status window (time on 'net, connection speed), new prefs.

MICRODOT-II
A superb combined email and newsreader within one GUI! Contains all the major features you would expect - MIME attachments, support for POP3/APOP, search function, multiple signatures, multiple user support, Arexx port etc.

AMIRC
Chat online with friends about topics, join conferences, organise mass meetings. The IRC is one of the most addictive elements of the Internet - AmIRC is the best Amiga IRC client.

AMTELNET
Telnet into remote computers (from anywhere in the world) - edit files on a computer in Germany from your Amiga, maintain directories for your web pages, check the status of the network, play online games.

AMTERM
AmTerm is a communications package which allows you to connect to a BBS, to another user (direct link), transfer files via a serial connection (Amiga<>Amiga, Amiga<>PC etc).



VOYAGER-NG
Voted the best Amiga web browser by CU Amiga - supports SSL for securing ordering, HTTP 1.1 (for the fastest web access) fastmem AGA support (use fast mem to store images) and very soon JAVA™, Javascript and AGA fastmem support!

AMFTP
AmFTP is the ultimate Amiga FTP client. Download/upload programs from any FTP site, also supports ADT to allow you to download the latest files from the Aminet and Archie to search FTP sites for files.

AMTALK
A direct chat client for the Amiga. Acts as an online answerphone service for people to leave messages. You can talk directly 'realtime' to friends on the Internet.

NETINFO
NetInfo is a cool tool for analysing the network and the people connected to it - 'finger' your friends to see if they are online, 'ping' servers to find the response speed.

X-ARC
X-Arc is the Amiga's answer to WinZIP™ - automatically decode LHA/LZX/ZIP files, edit the contents of these archives, create your own archives. Full integrates with NetConnect v2!

NetConnect v2 is a state-of-the-art Internet package aimed towards Amiga users wanting to connect for the first time (absolute Internet beginners), those who have been connected a few months (novices) and now, due to the keyfile nature of the software, is suitable for advanced Internet users who want to use the modules contained within NetConnect with their existing TCP stack. **NetConnect v2 enhancements include**:

- **Setup Wizard** - makes configuring your ISP a doddle. Choose your modem, enter some user details and then the rest of the process is completely automatic!
- **MIME Prefs** - Central MIME prefs interface means that you only need to setup file types once with on nice interface! This saves masses of time and effort (especially for beginners).
- **Control Manager** - A central control manager that allows you to store your favourite web and ftp sites, friends, email addresses, fax numbers and then use them within NetConnect modules - Voyager etc!
- **Multi-User** - Use Genesis/NetConnect with more than one user (a family) and log in on startup.
- **New programs** - AmTalk, NetInfo and X-Arc (a brand new WinZIP™ style archive management tool. Downloads lha/lzx/zip files from Voyager etc, auto-extracts them into X-Arc's GUI, manage the files).
- **Programs are now keyfile based** (can be used with any TCP stack - Miami etc)
- **Extras pre-configured**: MIME types (CD only), datatypes (CD Only), online help files etc
- **Dock bar** - allows you to create multiple dock bars with point and click ease - just drag the icons you have created into the icon bar! NetConnect v2 is pre-setup with its own icon bar for ease of use.
- **Programs are now keyfile based** (can be used with any TCP stack - Miami etc)
- **Printed manual** - understand NetConnect and the Internet quickly and easily (advice from NC users!)

NetConnect v2 CD [contains many extras: datatypes, MIME types (for www browsing) and much more] **£52.95**
NetConnect v2 Floppy Disks [only contains the core programs & online help documents] **£54.95**
NetConnect v2 Upgrade from v1 [registered NetConnect v1 users only] **£call!**

vapor software

If you are not interested in purchasing NetConnect you can also buy Vaporware Products individually either by disk, a keyfile sent via e-mail (quickest and cheapest method) or on CD-rom (currently only Voyager-NG and Genesis can be purchased on CD-rom) - CD versions have added extras such as pre-setup MIME types (VNG), HTML documentation etc.

	On CD	By Disk	By EMail
Genesis - New TCP/IP Stack for the Amiga [Available December]	£28.00	£22.00	£20.00
Miami - TCP/IP Stack for the Amiga	n/a	£28.00	£26.00
Voyager Next Generation	£28.00	£22.00	£20.00
Microdot-II	n/a	£20.00	£18.00
AmIRC	n/a	£20.00	£18.00
AmFTP	n/a	£20.00	£18.00
AmTalk	n/a	£17.00	£15.00
X-Arc	n/a	£17.00	£15.00
AmTelnet + AmTerm Package Deal	n/a	£20.00	£18.00

- *5% Discount when 2-4 Vapor products are bought, 10% Discount for 5+*

internet informer

Still unsure about connecting to the Internet? Confused by all the acronyms such as 'ISDN'? Confused about the costs? Wondering whether your Amiga can access the Internet? No need to worry any longer - we have released issue 2 of our 'Internet Informer' for Amiga users. A leaflet that offers you all the information you require in order to get your Amiga onto the Internet. Modem choices, software that is available, service providers for the Amiga, questions and answers. It also contains information about NetConnect and what we can do to get you onto the Internet. For your free copy, call us or write to us.

high quality modems

Choose from two high-quality __branded__ modems - the top of the range, award winning PACE 56 or the middle of the range Dynalink modem. Both come with a five year warranty. The PACE modem also ships with free lifetime technical support, UK caller ID (only modem available which supports this) and non-technical, easy to read documentation. The PACE is currently the best 56K modem you can buy, is UK produced and is recommended by the Internet press.

- Quality branded PACE 56 voice modem
- 56000 bps DATA/FAX/VOICE modem - true v34+ Throughput to 115,200 (230,400 for internal) BPS
- Group 3, Class 1 send/receive FAX (14.4)
- V.80 (video conferencing) capable
- Call Discrimination
- Fax on demand
- UK Caller ID
- 10 LED's for full status monitoring
- Analogue Simultaneous voice and data (A.S.V.D.)
- Speakerphone for hands-free operation
- Upgradable ROM chip
- On/Off switch to rear of unit
- Includes headphones/microphones - for voice control
- 5 year warranty
- Serial cable included (with 9 & 25pin connectors)



The above specifications are for the PACE 56K external voice modem. Dynalink 33.6K and 56K are very similar, except for the UK Caller ID support.

Dynalink 33.6K External Voice/Fax/Data Modem	**£79.95**
Dynalink 56K External Voice/Fax/Data Modem	**£99.95**
PACE 56K External Voice/Fax/Data Modem	**£129.95**

modem pack options

Various money saving packs are available. These are all based on either the Dynalink 33.6K or 56K and PACE 56K modem option. Call us for other pack options.

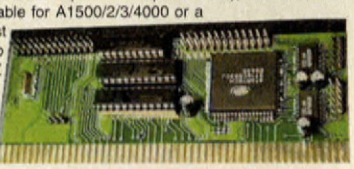
Code	Pack Contents	£ Prices
PK01	33.6 Modem & STFax	£ 89.95
PK02	33.6 Modem & NetConnect	£109.95
PK03	33.6 Modem & NetConnect & STFax	£119.95
PK04	33.6 Modem & NetConnect & Hypercom1 & STFax	£149.95
PK05	33.6 Modem & NetConnect & Hypercom3Z & STFax	£169.95

ADD £25 for a Dynalink 56K Modem (instead of the Dynalink 33.6K)
ADD £50 for a PACE 56K Modem (instead of the Dynalink 33.6K)

- All packs come with one month free connection to a major Internet Service Provider
- Choose between the CD or Floppy disk version of NetConnect with your modem pack
- Internal modem available - ISA card suitable for the Boxer.

high speed serial cards — new models! — from.. £44.95

The ***Hypercom*** range of high-speed serial cards offer your Amiga the fastest connection to the Internet, for comms and fax transfers. Available for the Amiga 1200 (these serial cards are placed within the internal clock expansion port - leaving the PCMCIA port and trapdoor free!), A1200 Towers and Zorro-II/III based machines (Zorro version suitable for A1500/2/3/4000 or a A1200 tower). These cards are currently the fastest serial cards available for the Amiga (upto 460,800bps connection). The Hypercom 3/3Z cards also ship with a buffered high speed parallel port which will drastically improve printing speeds on a laser (4x speed). The Hypercom 3/3Z cards contain a 9-pin and standard 25-pin serial ports whereas the Hypercom 1 ships with one 25-pin port. Serial and parallel drivers included. English documention.



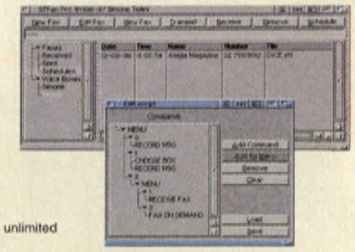
Hypercom 3Z

Model	Machine	Specifications	Price
Hypercom1	A1200	1 x 460,800bps highspeed buffered serial port	£44.95
Hypercom3	A1200T	2 x 460,800bps highspeed buffered serial, 1 x 500K bytes/sec parallel port	£89.95
Hypercom3Z	Zorro-2/3	2 x 460,800bps highspeed buffered serial, 1 x 500K bytes/sec parallel port	£79.95
Hypercom4	Zorro-2/3	4 x 460,800bps highspeed buffered serial ports	£99.95
Hypercom3i	Zorro-2/3	Expansion module for Hypercom 3Z/4 offering 2 x 460,800bps high speed buffered serial, 1 x 500K bytes/sec buffered parallel port.	£59.95

stfax professional £29.95

STFax Professional is new commercial fax program for the Amiga containing the sort of advanced features you would find within commercial PC fax software. STFax has been in the shareware for the last few months, and the brand new commercial "professional" version offers even more advanced features plus voice control for voice modems - use your Amiga as a digital answer machine, create a fax on demand service (ideal for small businesses. Allows your customers to contact you at any time and use fax on demand to remotely download facsimile information about your products!) and create advanced voice control scripts.

- **Full Fax Features:**
  - Support for all fax/modem classes (1, 2, 2.0)
  - Phonebook (store all your favourite fax and telephone numbers)
  - Scheduler (store fax messages to be sent at specified times)
  - Reports (quickly see when a fax was sent and received)
  - Datatypes support for image conversion
  - Printer driver to redirect all print-outs to a fax file (print from Wordworth, Pagestream etc!)
  - Viewer for viewing outgoing/incoming fax messages
  - Fax forward (forward faxes to another machine)
- **Advanced Voice Features:**
  - Use your Amiga as an answer machine (digital messages, unlimited storage space!)
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Myst

GAMING SPECIAL!

AMIGA FORMAT GOLD

Andy Smith dons his deerstalker and picks up his magnifying glass in an attempt to solve the mystery that is Myst...

Myst is very special. It's not often a game appears, on any format, that manages to completely engage the player, but *Myst* is just such a game. No wonder then that it's the biggest selling CD-ROM game of all time, having achieved a massive following when it was released for the PC and Mac a couple of years back.

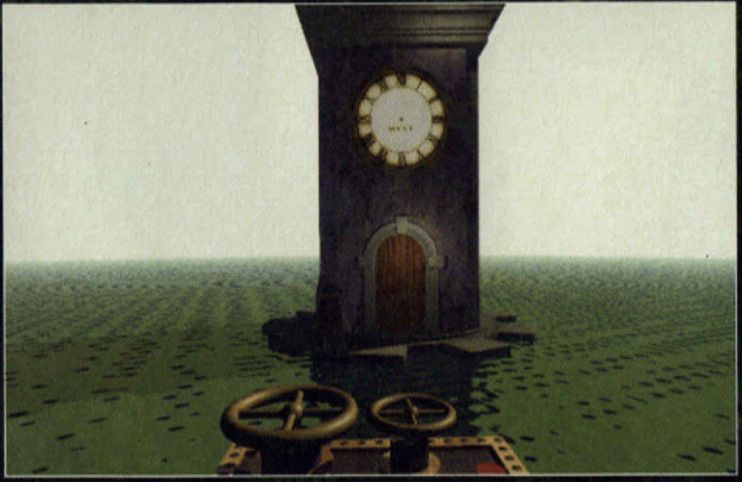
Its crown may well have been stolen now by some PlayStation game or other but it's certainly still something to crow about.

And it's not as if it's the easiest game in the world to get to grips with. Anyone looking for linear structure, simple puzzles and clues aplenty are going to find themselves very frustrated. *Myst* gives you nothing to start with and expects you to get on with it. Even after several days playing you're not going to be entirely sure what's going on or what you're supposed to be doing. But let's go right back to the beginning.

This is a point and click adventure, of sorts. You view all of the game's locations from a first person perspective. Interaction with the landscape is achieved by means of a small cursor in the shape of a hand that you move around the landscape. If you want to move forward, place the hand on the screen so it's pointing up. If you want to turn right move it to the right of the screen until it points right. Simple as that. If there's something you can pick up or pull or

> **"Myst is a strange island you find yourself on at the start of the adventure. Quite why it exists is not entirely clear..."**

Continued overleaf ➡







The quality of the graphics throughout Myst is impeccable and with the audio accompaniment every location oozes atmosphere.



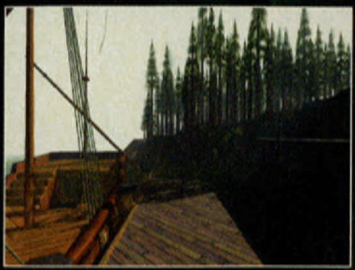
There are all sorts of clues to be found down in that stone tunnel, but first you'll have to figure out how to turn the lights on – believe me, fumbling around in the dark is no fun!













"Before you know it, you're immersed in the whole bizarre world of Myst. But don't expect it to be easy..."



Ah ha! A power trip-switch. Now then, maybe if I throw it, the power will be re-connected?

whatever, then the hand changes so it looks like it's gripping. You don't get much easier than this.

But what's the game all about? That, dear reader, is still a mystery to me. *Myst* is a strange island you find yourself on at the start of the adventure. Quite why it exists is not entirely clear, but after a couple of hours adventuring you come to realise that there's this character called Atrus who spends his life jumping between different ages and different places, helping the inhabitants (if there are any) and generally enjoying the wonder and beauty of the places he helps to create. Something's gone wrong in paradise though, and Atrus suspects one of his two sons, Sirrus or Achenar, of not only meddling with things they shouldn't but of actually destroying times and places that Atrus has lovingly built.

Confused yet? You will be, my friend. You have no clues to start with, either to what's going on or what you're supposed to be doing. After a bit of wandering around you'll suddenly start to get an idea of what's happening. A scrap of paper here leads to searching a room there which reveals a clue to somewhere else. Before you know it, you're immersed in the whole bizarre world of *Myst*.

But don't expect it to be easy. Not only is it generally vague, but a lot of the puzzles are really quite tricky. Miss some tiny detail and you could be wandering around for days going over the same old ground again and again. This is possibly the only real disappointment with *Myst*, but even that's forgivable once you're aware that it plays this kind of trick on you.

Let's take the scrap of paper as an example. After a couple of minutes on the island you'll find the paper that explains that there's an important message to be read on the 'imager' that's to be found in an ante-chamber next to your starting location. Fair enough, let's head there then.

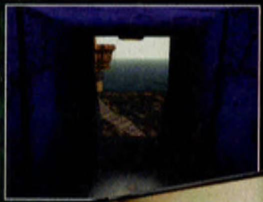
Right, we're in the ante-chamber and we've found what can only be the imager. Several speculative clicks on the thing have got it to do a couple of odd things, but there's no recognisable message coming forth.

A more detailed look round the room reveals a note on the wall by the stairs. The paper tells us to input the number of marker switches on the island into the imager to reveal the message. First of all, what's a marker switch? Second, how do you input the number (which for argument's sake let's say is eight)?

Right next to the note on the wall, on the top left corner, is a small button. You'd miss this if I didn't tell you – trust me. Click on this and the note moves to reveal a panel where



As you'd guess, getting the key to open that lock at the top of the ladder is no simple task. It involves flooding the whole chamber beneath you and then opening a floating chest. Surreal or what?





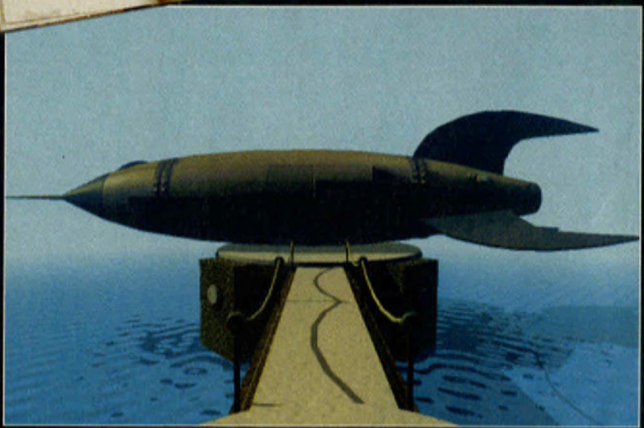


Part of playing Myst is searching for pages which you then insert in certain books. Each page gives more clues to the whole mystery.

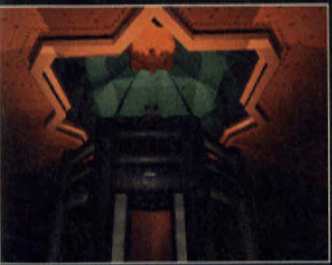


One of the first locations you'll discover. What you're supposed to do here is not obvious though.





Remember that power trip-switch? Well the power cable runs to this rocket. Getting it powered up and getting into the thing is a major operation. Of course.









you can input numbers. Enter the number eight, go back to the imager and click on the right button (you really can't miss this) and suddenly the message comes through, and now you're off.

This kind of thing doesn't happen that often but it does teach you to be very observant when you're in a location and to click on everything. This can, however, be time consuming when you see how detailed some of the locations are.

Don't, whatever you do, let that put you off. I merely want to illustrate that you have to play *Myst* carefully and with some effort. As the instructions point out, you have to play as if you're really there and, though this may be stretching things a little, it's worth bearing in mind.

Myst is intriguing, addictive and thoroughly gorgeous to look at, although I had a few problems getting the game to run on the A1200 in the office (solved with a patch downloaded from a website) and it needs a whopping 8Mb of fast RAM. However, it's still one of the best adventure games to have been released on the Amiga. Even if you're not really interested in adventuring, you'll find *Myst* to be thoroughly engaging. The clever and subtle way the game reveals its secrets makes it hard to leave and the way the whole story is woven together makes you keen to learn more.

Just as one piece of the jigsaw falls into place you find there are half a dozen more pieces that don't seem to fit anywhere. And don't for a minute expect to be stuck on the island of *Myst*. You'll be off all over the place, sometimes without really wanting to.

Myst is not really a game for the novice. Although the puzzles are largely logical, it does take a bit of common sense to make head and tail of them. You don't have to be Einstein to get through the game but it's unlikely you'll understand what you're supposed to be doing if you're thicker than two short planks (which you're not because you're reading *AF*) or a complete beginner when it comes to adventure games.

You're also going to need a notepad and pen to remind you of important clues, which may be aural as well as visual, and be prepared to sit and think situations through. If you are, and you certainly should be, and if you've got a machine with a high enough spec to run the game properly, then you should search for a copy of *Myst* as soon as you can.

As for me, I'm off to find out what's so important about January 17, 1207, 5:46am. Suggestions on a postcard please...

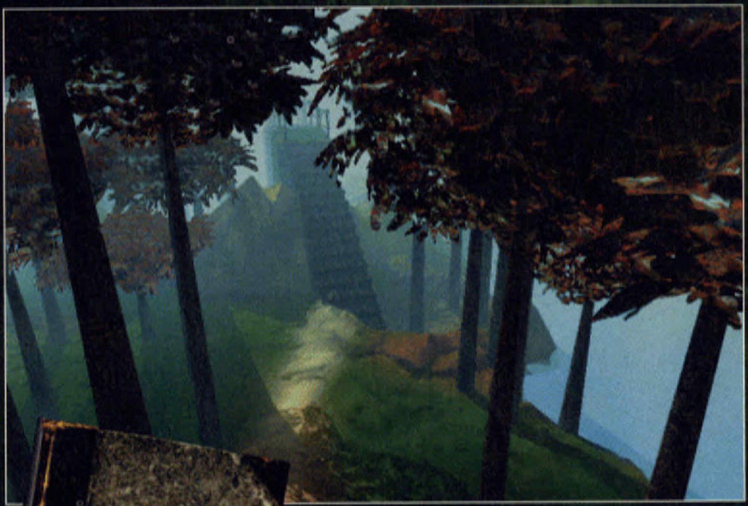


Spend as much time as you can in each location. Clues could be lurking almost anywhere.

> **"...you have to play as if you're really there... Myst is intriguing, addictive and thoroughly gorgeous..."**



When playing, be prepared to re-visit locations many times and don't be shy of trying the unusual as progress can be made in surprising ways.







This book is very important. Read it carefully (not easy if you're playing on a telly) and be prepared to take notes.







Lawks, now what's this all about, eh? Fear not, dear reader, everything becomes clear – eventually.

PUBLISHER: Sadeness (01263 722169)
PRICE: £29.95
VERSIONS: A1200
REQUIREMENTS: 8Mb FAST RAM, CD ROM
RELEASE DATE: Out now

GRAPHICS: ●●●●●
The graphics can't be faulted. Detailed, stylish and varied, you won't tire of them.

SOUND: ●●●○○
Sparing, but the eerie music and effects make it superbly atmospheric.

ADDICTION: ●●●●○
Get past the start and you'll find yourself hooked and unable to leave.

PLAYABILITY: ●●●●○
So easy to use you'll get lost in this world.

OVERALL VERDICT:
One of the best looking Amiga games of all time. It will intrigue and enthrall you from the moment you first start.

92%





GAMING SPECIAL!







Mobile Warfare





With a tin hat and a vague idea which end the bullets come out of a gun, intrepid 'Stormin' Andy Smith prepares to liberate Eastern Europe. Gulp.

Another bunch of baddies (the red chaps) get their comeuppance (below). Note the very small playing area for each scenario – there's not much room for manoeuvre.



Some mad Italian General is running amok in Eastern Europe apparently – how do all these loonies get hold of armies, eh? So it's time to call in the cavalry and, erm, that's you that is. Applaud Software's latest, coming via the Islona label, is this turn-based wargame.

Each battle is strictly of the skirmish-type in that you only ever have a handful of units to control and your theatre of operations is limited to a single screen, representing a mere couple of hundred square yards. There's none of this taking a whole horde and sweeping across the Russian Steppes or anything like that.

Just which units you have to control depends on the scenario. At the start of each mission you're given an objective and told which troops are available to you, possibly just a couple of chaps with rifles or maybe a couple of tanks. Then it's down to using your bestest warfare tactics to achieve your objectives.

Now then, using your bestest warfare tactics in *Mobile Warfare* is a little unrealistic. Not that it actually matters much because both sides are fighting with the same rule book, but you can't, for example, move a tank through a bush.

It sounds a bit ridiculous, but once you're aware of these little quirks they can be used to your advantage, like the little quirks could be used to your advantage in *Dune II*, which *Mobile Warfare* bears a passing resemblance to.

If you've got limited firepower in a particular scenario then a good tactic is to get your units into a position where the enemy can only attack you from one side. It's your basic tactical thinking really, innit?

The combat then. Each unit (bloke, tank, helicopter, whatever) has a set number of movement points that can be used during its turn. Suppose a tank's got four. It could then move forward two steps and have two attacks on any adjacent enemy unit. Or it could move forward one step and have three attacks (armour permitting) on an adjacent enemy.

Notice how the enemy units have to be adjacent? Good, that's because there are no ranged weapons in *Mobile Warfare*. All of the combat between units occurs when they're next to each other, and I don't mean



(Top) With only two helicopters to fight with, the first visit on this scenario has to be the barracks. Knowing just what to buy is crucial. Instead of going for that tank which can't fire at aeroplanes, a wiser investment would be in a couple of cruise missiles that can take 'em out before they get the chance to do any damage. Then again, that could be a complete waste of money...









diagonally either because there's no diagonal movement in *MW*.

You can, however, call in airstrikes from time to time. Your ability to do this though is limited by two factors – the scenario and whether you have the funds to afford one. In most scenarios you're given a set amount of cash and a barracks where you can 'buy' a variety of units (think of it like your construction yard in *Dune II* or *Command and Conquer*) decide which unit you want (the porkier the unit, the more expensive, natch) and the thing pops out.

It's making and using the right mix of units that's the key to success in *MW*. Every unit has what the designers call a 'best target' which is the target it's most effective against, like helicopters against troops, and a 'worst target', like riflemen against tanks. Getting the right unit to the right place at the right time is what this game is all about.

"Each battle is strictly of the skirmish-type in that you only ever have a handful of units to control..."

You're never in the position where you've got too much money to spend on units, but by the careful use of nurses to heal soldiers, and technicians to heal tanks and so on, you can make your limited resources stretch a long way.

You occasionally get the chance to replenish your coffers during the battles. If you see a small brown chest on the screen, get one of your units onto it as soon as possible as it'll contain money and you don't want that to fall into enemy hands!

In essence, this is what *Mobile Warfare* is all about and it's not half bad either. It's nowhere near the quality of something like *Dune II* but the designers have come up with some interesting scenarios that provide a good challenge.

It's simplistic and limited but actually very addictive. There aren't enough scenarios to keep you playing for weeks but you can create your own little skirmishes where you decide which units face either other and their relative strengths, which is something I suppose.

There's no game save option. A password is given to you every other level, which does create its own problems as it's a little annoying to get through a scenario by the skin of your teeth, only to have to go back and do it all again because you messed up the one following it.

It's not a huge problem though, so if you fancy a pretty awful-looking but enjoyable skirmish wargame then don't let that put you off. *Mobile Warfare* will provide you with a fair slice of fun.

PUBLISHER: Epic Marketing (0500131486)
PRICE: £14.99
VERSIONS: A1200
REQUIREMENTS: 1.5Mb Chip Mem
RELEASE DATE: Out now

GRAPHICS: ●●○○○
Not the best. Passable rather than glorious.

SOUND: ●●○○○
No sound effects but there's a tune that plays throughout. Not that it's a great tune, mind.

ADDICTION: ●●●●○
Every scenario's winnable but some are very tough and you'll only just scrape through. That makes the game addictive in my book.

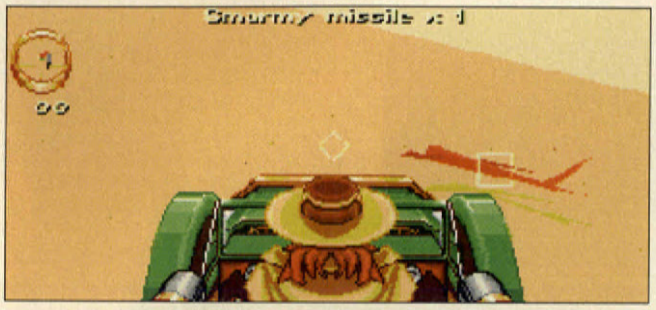
PLAYABILITY: ●●○○○
Some experimentation is required but it's easy enough to find your way around.

OVERALL VERDICT:
Doesn't look or sound too good, but it's fun to play. It's simple, addictive and challenging.

69%

GAMING SPECIAL!

Wingnuts



As soon as the target box over the enemy plane changes to a death's head, it will be time to launch one of your Smarmy missiles. Tee hee!

On the planet Holy Doobie, the most popular combative sport is Wingnuts. Our Earthly representative there is the hapless Andy Smith...

Just imagine the characters from *Wacky Races* all dogfighting with each other in odd flying machines and you've got a pretty good idea of what *Wingnuts* is all about.

The characters aren't actually from *Wacky Races* as that would mean they'd have to have been licensed to be used in the game, but with characters called Dicky Dastardly and Smutley, I think you get the picture. The flying machines they get to control are pretty much right out of *Wacky Races* though, all flappy wings and odd attachments.

> "If you get a hit then you can **laugh at the other player** who now has their screen covered in red paint. Tee hee."

Wingnuts is an arena-based dogfighting game. Pick the number of players you want (up to four can play if you link two Amigas with a null-modem cable, with two people sharing an Amiga each), select one of the half-dozen characters, give them a flying machine and then pop along to the armoury.

Now this is an impressive part of the game. There are over 40 weapons to choose from here, although not all are available to all machines all of the time, and some of them are very impressive. The paint missile is a good example. Get an enemy in your sights, wait a couple of seconds for the cursor to change to a death's head to indicate that you've got a lock-on and then fire and forget the missile. If you get a hit then you can laugh at the other player who now has their screen plastered in red paint. Tee hee.

Unfortunately, it's not like some of the other missiles in that it doesn't do permanent damage. The best you can hope for is that the player will become so disorientated that they'll crash into the landscape and die.



Choosing your craft at the start of the battle. Every one's different so choose wisely or you won't last.



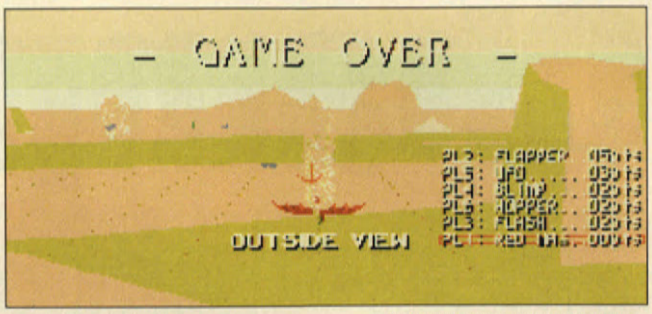


Delicious Devine? I thought Devine was some fat bloke who wore dresses and sang? Oops, maybe I'm giving away my 80s disco-dancing background...





Two examples of what's wrong with this game. Are we flying up, down or sideways in these shots? I'm afraid there's no way of knowing.



And here's something you're going to see very often. Just when you think you're climbing to 20,000ft, the ground smacks you in the mush.

Some of the other missiles are pretty devastating though, so evasive action must be taken once you hear the warning beeps telling you that someone else has got a lock on you. This is especially important when you're playing solo as the computer players are merciless. Even if you turn their intelligence down to 'none' you'll find they're quite a challenge.

And now onto *Wingnuts'* problems, starting with the mere annoyances to the completely wrong. First in the dock, m'lud, is the actual playing arena itself. It's teeny-weeny. It wraps round but there's no warning when this is going to happen so you spend a lot of time chasing someone only to see them disappear in front of your very eyes and re-appear immediately some way behind you.

The designers reckon you can use this tactically to avoid incoming missiles and the like, but frankly I think they're stretching it.

Secondly, the game's scanner. This device is located in the top left corner of the screen and is almost impossible to read. You can just about make out that there are some coloured dots (the colours being the actual colours of the other players' machines) but there's little chance of being able to tell whether they're above or below you, even though that information is supposed to be indicated. Quite simply, it just doesn't work very well.

A major accomplice, your honour, is the frame update. Even running on my A1200 with an '060 board the graphics are jerky and far from smooth. This has the knock-on effect of making it very difficult to fly any of the planes with anything approaching skill. I shake my head.

Finally, and possibly the biggest single factor responsible for this game appearing before you today m'lud, is the curious choice by the game designers to have the ground the same colour as the sky. Ok, so we're on some alien planet, but you try flying around in a dogfight when you don't know whether you're up, down or sideways.

Thankfully, it doesn't happen in every arena. Some of them are flooded so the ground appears blue, which at least lets you know which way is up, but should you find yourself in an arena that isn't then you're going to be in whole heap of trouble before you even start.

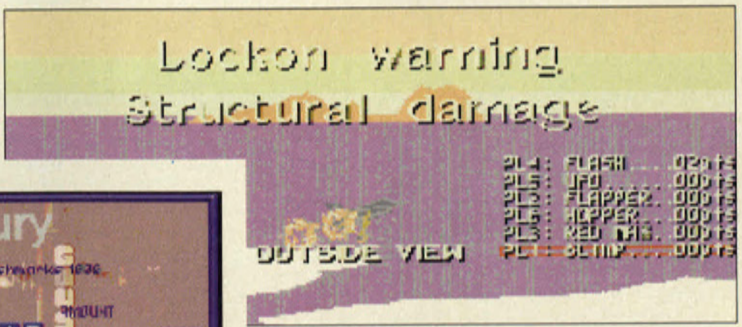
The designers have made some attempt to make things a little less confusing by including great lumps of flat white colour that must surely represent clouds. You can't see through 'em so tactically you should be able to hide in 'em. Erm, no, not really. The chances are, as soon as you pass through one (blink and you'll miss it) you'll hit the edge of the arena and then be transported to a cloudless area.

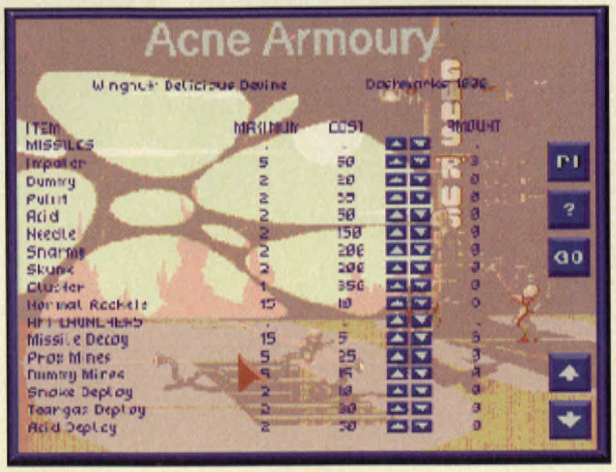
I'm really getting fed up saying this about games of late: *Wingnuts* is not dreadful but it's just such a wasted opportunity. The ideas are mostly fine and the weapons are certainly good – unfortunately, most of them seem to have been aimed directly at the programmer's and designer's feet. AF



"The flying machines they get to control are pretty much right out of Wacky Races though, all flappy wings..."









On flooded levels you at least have an indication of where the ground is because it's blue. This makes playing the game a whole lot easier.

PUBLISHER: Skunkworks (01846 675453)
PRICE: £14.99
VERSIONS: A1200
REQUIREMENTS: 2Mb RAM
RELEASE DATE: Out now

GRAPHICS: ●●○○○
The characters are fine. It's the fact that the ground's just like the sky. DON'T DO IT!

SOUND: ●●●○○
The sound effects aren't especially wonderful but they do the job adequately enough.

ADDICTION: ●●○○○
You'll have a blast for a while, but it's unlikely to grip you.

PLAYABILITY: ●●○○○
It doesn't take long to find out which keys do what but it's not the easiest game to play.

OVERALL VERDICT:
More of a misdemeanour of a game that a blatantly criminal act. Not the best of starts.

58%

Championship Manager

GAMING SPECIAL!

Andy Smith once again attempts to get Bristol Rovers back to the top of the Premiership and into Europe. You'd think he'd have learnt by now...

If you can be bothered, head for the transfer screen as soon as possible and see who you can pick up for a song. Some of 'em are bargains!



You know, the Production Editors are so overworked here at Format Towers the only fun they ever get is making snide little remarks about us overworked (well, this month anyway) and very underpaid (ahem) reviewers.

You and I, dear reader, are above such things. Come with me as I attempt to get Bristol Rovers from Second Division obscurity to the very top of the Premiership. Where they should rightly be. Oh yes.

It's now 2pm on a wet Wednesday afternoon. So far I have picked my team and told them I want them to play in a 4-4-2 formation, taking a direct approach to their football. I have neither bought nor sold any players yet. My team are about to play their first match. I should also tell you that it has taken since midday to get The Gas (as they shall henceforth be known) this far.

The screen is currently black, save for a small spinning ball in the middle. The room is silent save for the occasional humming of the disk drive. It's now 2.15pm and I'm reading the Guardian. The screen is still very black.

2.40pm and I'm beginning to think the game's crashed. I am, however, very reluctant to re-boot because it's taken so long to get here. The drive light is still on anyway. A few desperate mouse clicks and key presses have apparently done nothing. Back to the paper. 2.44pm and I'm going to have to re-boot. Here goes.

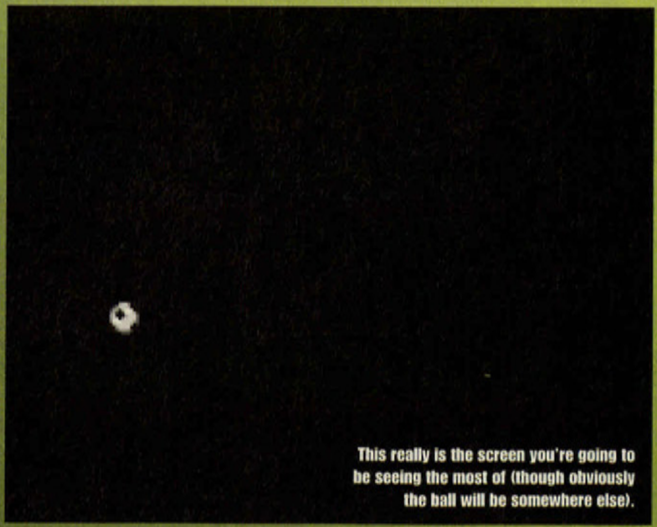
2.45pm. Disk one in the drive and 'Start Game' selected. Yes, a new game please. Yes I've got two disks that the game can use as disks three and four. 2.46pm, disk two in the

> **"I'm inclined not to bother trying to sign or sell players simply because of the tedious waiting times..."**





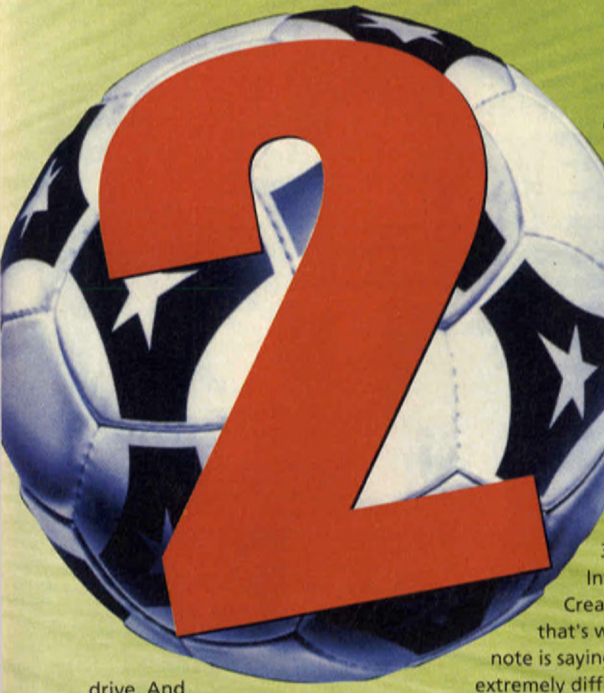
Look! A match in progress! Sadly, this ended in a nil-nil draw (Rovers through after the first leg).



This really is the screen you're going to be seeing the most of (though obviously the ball will be somewhere else).



Championship Manager 2's main menu screen. Simple but effective. You don't see this too often.



drive. And the game's to be called Spike for historical reasons – I won't bore you with the details. 2.47pm and disk three's in the drive. 2.49pm and disk four is in the drive. Ho hum.

2.51pm. 'Player 1 select team' it says here. Bristol Rovers are selected and the manager's name is duly entered. Disk four is changed for disk three and then changed back again. And again. And again. 2.55pm and a small blue window's appeared on the screen telling me that it has '65% Shortlist Updating'. This sounds very groovy. More disk swapping. 3pm and we're at '18% International Team Creation', or at least I think that's what the little blue note is saying because it's extremely difficult to read writing that's horribly tiny and horribly blurred. More disk swapping.

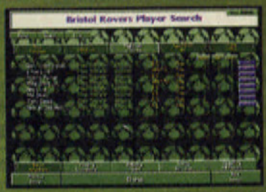
3.01pm and the game's telling me which friendlies England will be playing during the coming season. I fancy Bulgaria to get a beating. The black screen's back. 3.02pm and I now know who Northern Ireland will be playing during the coming season.

The game now rapidly (by its standards) runs through who Scotland, the Republic of Ireland and Wales will also be playing during the coming season before going back to it's favourite black screen. I fancy this will be some time so I'm nipping out of the office for a cigarette (don't try this at home kids). It's 3.07pm.

3.15pm and I'm being told that our first match in the Coca Cola League Cup will be at home on Weds 21 August to Lincoln City. That should be a win for us.

Disk swapping again before watching more black screen. It's now half an hour since I took control at the Memorial Ground and I've yet to see my squad set up. 3.21pm and we're at the game's main menu screen. I've just hit the 'Advance' option to get us to the first match. The screen's gone black. 3.25pm and apparently Plymouth Argyle have appointed Kevin Lock as their new manager. Great.

3.40pm and the screen's still black. I'm very close to giving this up completely. I think this game stinks. Why on Earth have they been so crap? Apparently, if the game's manual is to be believed, the waiting is simply because this started life as "...a PC CD ROM game. We have tried to modify it as best we can but it is rather a memory intensive game for a machine like the Amiga...". What a load of rot.



There are many parameters to alter when searching for that elusive perfect signing.

> **3.40pm and the screen's still black. I'm very close to giving this up completely. I think this game stinks.**

Championship Manager 2 is more than a major disappointment. If you've already bought the game, then I'm inclined to say 'serves you right. You should have waited for the review' but I won't, just because I can understand the impatience of a hardened gamesplayer.

I've played a few games now. Rovers are doing quite well but it's still not rivetting stuff. I'm inclined not to bother trying to sign or sell players simply because of the tedious waiting times between each screen.

The commentary during matches is fun for the first couple of games but soon becomes repetitive and you're basically left with a dull, hard to read football management game that simply hasn't been anywhere near worth the wait.





If you can read any of the text on these screens then you're doing your eyes serious harm.







Decide on any special runs you want your players to do (left). Click on a team number and then click on a player to get them in the squad (top). Rovers in good shape at the start of the season (above).

PUBLISHER: Sadeness (01263 722169)
PRICE: £29.95
VERSIONS: A1200
REQUIREMENTS: A1200 only
RELEASE DATE: Out now

GRAPHICS: ●○○○○
Tiny text that's impossible to see on anything other than a monitor with direct video cable.

SOUND: ○○○○○
None. Not that you need any to play CM2 but it might have made the waiting less tedious.

ADDICTION: ●○○○○
Unless you're reading a good book, the waiting's going to send you somewhere else.

PLAYABILITY: ●●●○○
Simple and easy enough to play once you've found your way around the main menu.

OVERALL VERDICT:
Oh dear. There's no excuse for this poor piece of software. Avoid at all costs.

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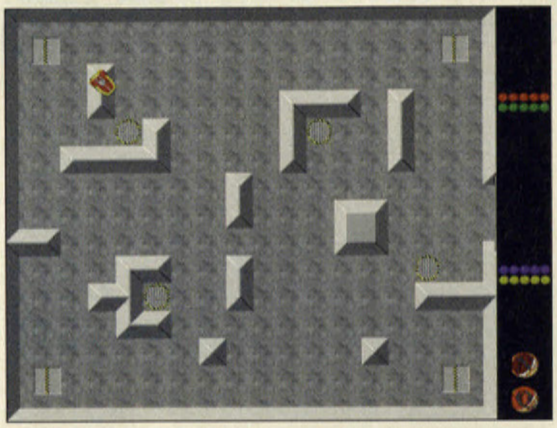
H-Bomb

WORK IN PROGRESS

In the second part of this Work in Progress, James Ceraldi talks about the early problems and setbacks.

When we started in late 1996, it was clear that working on the Amiga was not going to be easy.

At that time, there was a new and promising compiler called StormC. However, getting it was quite an experience and we paid $600 Cdn by ordering it from the UK.



The basic graphics of tanx, which was used to test the developing code in early October 1996.

While we waited, we used the demo copy, ensuring that our code was under the 30K limit. The problems getting the compiler were just the start – getting Amiga documentation was a nightmare too. If it wasn't for the developer CD that we finally tracked down, we would probably have given up.

The other indispensable resource was Aminet, but it can take some time to sift through what is useful and what isn't. That's how we discovered AHI way back in its beginnings... unfortunately, this was after we had developed an entire sound and music system ourselves. Vive l'Aminet!

Until we had the developer CD we had to rely on the ROM Kernal Manuals for OS 2.1. There were many problems that would have been solved in hours rather than days if there had been easy and readily available access to the developer documentation from the start.

We eventually realised that there was a huge problem in coding the games that we wanted to do with the 2Mb of AGA machines. We wanted screens of 640x480, preferably 800x600 in at least 8-bit, 256-colour while multi-tasking. When you count in double buffering, graphic objects, sounds and music, there was not a lot left, so we decided to focus on RTG.

This was no picnic either. At the time, there was only CyberGraphX in the mainstream. There were no games, not even *Nemac IV*, so we had no idea if RTG could even handle the requirements for a game.

CyberGraphX has never catered to game programmers and there were no functions whatsoever to handle game issues.

So what did we have? We had the low level library that would give us joystick and keyboard functions but no documentation, and we had datatypes which were useful but slow. The Amiga's anim format was not going to be much use for RTG above 256 colours, and we had 4 sound channels to split between sounds and music!

We did a quick test to see how to do Amiga game programming tasks in RTG. In October 1996 we had a test called *tanx*. There was no collision detection, sound or music and the graphics were rudimentary. However, it was the beginning and it made us see some of the problems of RTG game programming, such as double buffering and collision detection. Normally we could use the AmigaOS functions to do these tasks but not with RTG. There was a lot of trial and error before we discovered techniques that would work for double-buffering and created code to solve the collision detection issue.

Our test grew and became a game for us to play and test our code. We were excited and working harder than ever. A tip for game programmers is to plan your games before you start. Don't let them evolve as you code as you'll make more mistakes, have to back-track more and you'll never quite know how you are progressing. This makes giving time-lines about as accurate as a scud missile.

> "...the game could only be accomplished the way we wanted with a top-down texture-mapped graphic engine"

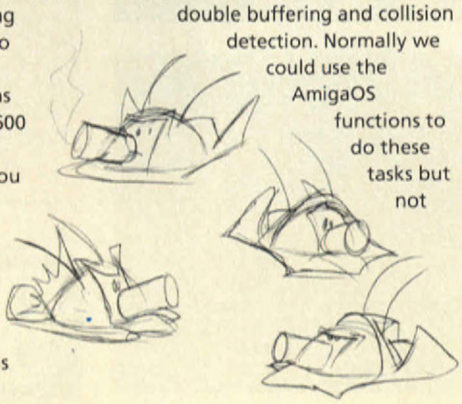


As you might guess, *Zone 99* grew out of *tanx*. Not that the *Zone 99* game idea is a bad one, but when we finally did do the game design, we realised that the game could only be accomplished the way we wanted with a top-down texture-mapped graphic engine (similar to a first-person 3D engine) rather than the top-down sprite-based engine that we had. So in May 1997 work slowed on *Zone 99* as we decided what we were going to do about this.

After much consideration and quite a few designing sessions, we created *H-Bomb* and decided to delay *Zone 99*.

Our game developments have been a long process. We had to test and ultimately throw out AGA support because of graphic memory requirements. We had to reject five anim players, finally creating a custom format. We had to discard our audio system and rebuild it around AHI and we had to overcome the shortfalls of CyberGraphX.

So what did we do right? Well, that's what we are going to talk about next time.



Some early sketches which developed into the more polished tanks of H-Bomb.

More details...

Aurora W·O·R·K·S

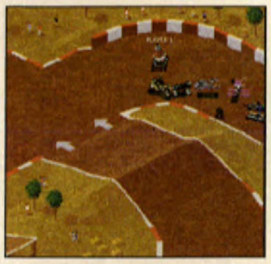
Aurora Works Inc. are taking pre-orders for H-Bomb at US$34 plus shipping, but have no UK distribution date set as yet.

If you want to get in contact with Aurora Works, you can visit their website at: http://www.auroraworks.com or write to them at: Aurora Works Inc. 358-114 Queen Mary Road Kingston, Ontario K7M 7E8 Canada.

GAMING SPECIAL!

Ultimate Super Skidmarks

Having just sold his car, the whole of the West Country breaths a sigh of relief now that Andy Smith's confined to racing on the Amiga.



Oh boy, can I rip 'em up on this one though! Ever since it first appeared, *Skidmarks* has been a firm *Amiga Format* favourite. There's just something that's so playable about this game.

It's more of a pure racer than something like *Micro Machines* and, even though it sounds fairly silly, there's something extremely satisfying indeed about churning up the tracks and putting skid marks all over the course.

> **"...there's something extremely satisfying indeed about churning up the tracks and putting skid marks all over..."**

Ultimate Skidmarks features everything that appeared in *Super Skidmarks* but now it's on CD and there are a couple of additions. There are some 50-odd cars to choose from now and up to eight of them can run around on your AGA machine, though only four of them at once if you're towing caravans.

With Acid's reputation for weirdness it should come as no surprise that some of the new vehicles are a little odd – skiers, the Starship Enterprise, X-wing fighters from *Star Wars* and a rather disturbing baby in a little walker. Strange fruit indeed.

Also included on the CD are *Skidmarks Farmyard* and *Super Silly Skidmarks*, but both of these are a bit lame with the only real additions being the odd, quiet, sound effect.

The rest of the game's just peachy though, the three player split screen is good, though a little confusing, and it's fab that you can locally and remotely link a couple of machines together and really get the adrenaline pumping.

There's still the single race option or the championship mode and it's still disappointing that in championship mode you don't get the chance to choose which car you drive. You either drive the Porsches in the Porsche championship or the F1 cars in the F1 championship or whatever.

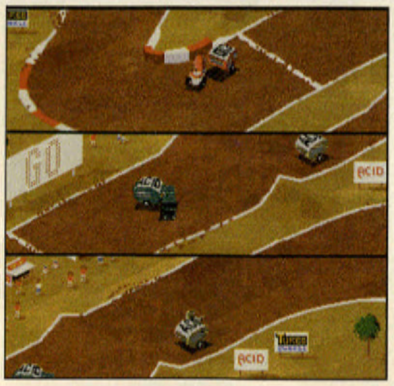
And it's still curious to find that the computer drivers are very easy to beat when you're having a single race and a complete nightmare when you're in a championship. Well, it is when you select the pedal car option. If you try the zippy or slippery options then things ain't quite so easy.

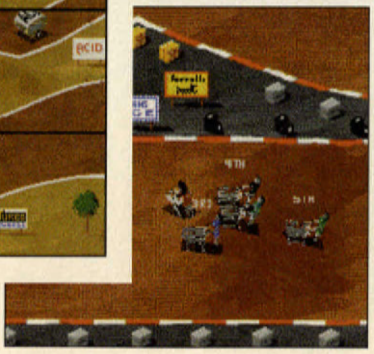
Whichever way you look at it, *Ultimate Skidmarks* is just the thing to slip in your CD drive (when you're not playing *Myst* that is). Go for it.



There's a bloke on skates, a tank, a double-decker bus and a football all racing each other on this course. Madness reigns in Ultimate Super Skidmarks.









A toilet towing a caravan? Well, of course (top). Sainsbury's on a Saturday afternoon (right).

PUBLISHER: Guildhall Leisure (01302 890000)
PRICE: £14.99
VERSIONS: A1200
REQUIREMENTS: CD ROM
RELEASE DATE: Out now

GRAPHICS: ●●●○○
Some of the colours picked for the vehicles are horrid, the overall graphics are fine.

SOUND: ●●○○○
The new sound effects are a bit crap and they're very quiet.

ADDICTION: ●●●●○
Once you get going it's so tempting to let everything else sit on the backburner. Ace.

PLAYABILITY: ●●●○○
Left, right and accelerate – what could be simpler? Oh, you get to toot your horn too.

OVERALL VERDICT:
Don't expect a whole load of additions and new features and you won't be disappointed.

90%


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GAMING SPECIAL!

Reader Games

Look through a copy of Homes and Gardens magazine and then look around your living room. If it's anything like Andy Smith's, yours will never be featured within the pages of that prestigious tome. These games, created by Amiga Format readers, are the Amiga games' equivalent of Andy's living room. They are, of course, the...

ON THIS MONTH'S CD

AFCD24:-ReaderStuff-/-ReaderGames-

Which makes this section of *Amiga Format* more like *Sheds and Allotments* than *Homes and Gardens*, but we contest that some of the 'sheds' featured here are just as good as some of the 'homes' you'll find elsewhere. Just because they're not dressed up quite so well doesn't mean they're not as good to live in. Oh look, this analogy is getting far too stretched. Suffice to say that just because some of the games featured in Reader's Games look crap, it doesn't mean they're not great fun to play.

The object of the exercise here is to simply let our readers display their game-creating talents without fear of ridicule (mostly). We merely offer advice and help in order to keep them on the right path when it comes to making a game that other people will want to play – for fun and everything.

Even though £50 doesn't buy a great deal in this day and age, it's still better than a kick in the teeth and you'd be pleased if someone gave it to you, which is why we offer the author of the month's best Reader Game just such an amount. Nice folks that we are.

All you have to do to stand a chance of making that £50 yours is code a game, stick it in an envelope along with the reader warrant and a photo of yourself and sit back and wait.

GAME: Amigotchi III AUTHOR: Samuel Brookes LANGUAGE: Blitz Basic



Hurrah! Just a couple of months ago (*AF105*) I was very excited to get *Amigotchi* from Samuel Brookes, only to be severely disappointed when it transpired that the little fella did absolutely, erm, nothing.

Hang on. I wrote that intro last month. For *Amigotchi II*. A Reader Game from Samuel Brookes. Now he's sent me *Amigotchi III*. So, what's new?

Erm, erm. Actually there are a couple of new bits. Your Amigotchi now goes to school (!) and answers mathematical questions periodically (he always seems to get 'em right, too). He also goes to sleep occasionally, sometimes for as long as 6 seconds. None of these things will manage to keep you interested for more than just a couple of minutes, though.

Look, Samuel, you've obviously put in a lot of effort with this and for that you must be commended. It's just a shame that you're wasting your obvious talents on something that's not worth the effort. Switch to something that people can play and you'll improve your programming skills and you'll get a lot more fun out of it. And please, no *Amigotchi IV*. Thanks.





Again, a Tamagotchi clone that doesn't actually do a great deal at all. Don't be fooled by the in-game game PC-Gotchi either – it's pretty grim.

VERDICT:

Better than Amigotchi II (which was better than Amigotchi) but it's still not going to keep you even vaguely entertained. Give up the Tamagotchi theme and switch to something more immediate. You've got the skills, they just need to be targeted a little better.

GAME: Orb AUTHOR: Alistair Stewart LANGUAGE: Amos Pro

Proof that the Reader Games pages of *AF* are informative, entertaining and inspiring comes with the arrival of *Orb* from Alistair Stewart.

After finding a copy of *Amos Pro 1.3* on an old *AF* coverdisk, Al's decided to have a bash at coding himself, and what a start he's made!

Orb's a two-player game that takes place in one of several arenas, which seem to change randomly during the game. The player has to move his ball around and either bounce on top of his opponent or get his opponent's ball to fall off the bottom of the screen. Simple.

And what surprising fun it is. Alistair has managed to get the inertia on the balls almost perfect, although they do seem just a tad light. The novel scoring system (half your points are lost if you fall off the bottom of the screen, and half again for every subsequent fall off the bottom, while five are gained every time you bounce on an opponent, causing them to lose two) combine to make this addictive fun.The loser is the first player to reach zero points.

What it needs is a decent one-player mode. If that's not possible, what about three or four people playing at once? The beauty of this game is its simplicity. I don't think it would benefit from having weapons and such, but maybe the odd bonus, like a freeze the other player bonus, would make it even more enjoyable. Welcome to the world of games design Alistair, let's hope you're around for a long time to come.





Now this is more like it. A simple game that's addictive and enjoyable. It still might not look like much but it's heaps of fun to play.

VERDICT:

Simple yet highly addictive. Although I don't think Alistair can take Orb very much further, it's a very promising start. Now just play as many games as you can Al and pinch all the best ideas – it's what everyone else does!

GAME: Number X AUTHOR: Ermanno Manzoni LANGUAGE: Amos

It's apologies time. Back in *AF106* I received this game from Italian Ermanno, who's submitted several games to Reader Games now, most of which have been of a very high standard. I couldn't get this one to work properly and so I gave it a bit of a kicking. Unfairly as it turns out.

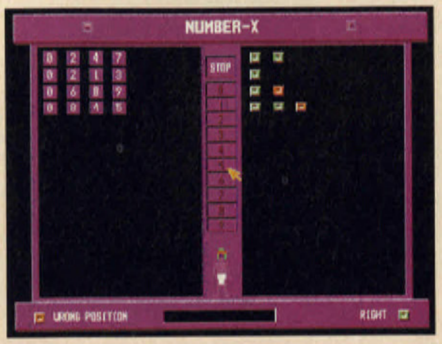
Ermanno's re-written to me and explained where I went wrong and now the game works fine. But while I'm here people, don't bother sending in games that need to be loaded into something else to make them run as I need games that either auto-boot or can be run directly by double clicking on their icon on the Workbench.

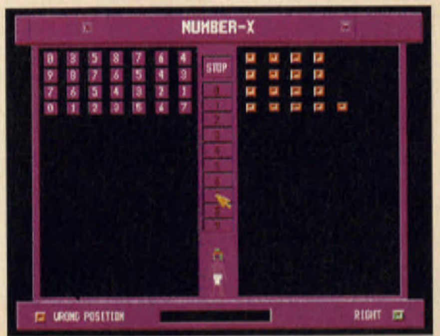
Back to *Number X* though. As I thought last time, it's a *Mastermind* kind of game – not the question and answer television quiz, but the old seventies game where you had four coloured pegs hidden and your opponent had a set number of turns to guess what they were.

Number X is exactly the same, although it picks numbers and not coloured pegs to hide, and is even trickier because you can opt to have up to seven hidden numbers to find should you so desire.

You pick your number and then the computer gives you either a red peg to show that you've picked the right number but in the wrong part of the sequence, or a green peg to show right number in the right place. The really tricky part is trying to figure out which one's the right one.

It's good. There's not much more I can say about it. If you fancy a good guessing game then you'll get a lot of fun from *Number X*, especially as it's got a decent one-player mode included.





A game featured before, but this time obviously working. Try playing **Number X** with seven hidden numbers – it'll drive you right round the bend (well, I could never get all of them anyway).

VERDICT:

Simple but effective, with a surprisingly good use of sound. My apologies go out to Ermanno for not getting this to work the first time round because it's a fine puzzle game that'll entertain you for ages.

GAME: Pirates Cove AUTHOR: Steve Bailey LANGUAGE: Blitz Basic



Steve is no stranger to Reader Games and that's really good news for the rest of us because, not only is *Pirates Cove* his best game to date, it's one of the best we've ever had submitted to Reader Games.

Remember the old MicroProse game *Pirates!*? Well, this is sort of a little bit like that. But only a little bit. Essentially you're in charge of a ship and have to find 14 scrolls that are buried on 14 islands. But you can't just go charging round the islands willy-nilly because they're riddled with traps and the only way to get to each island's treasure safely is to get hold of a map.

Maps can be bought at any time during the game and, after you've got your first map and found your first scroll, you should have enough money to buy the next and so the chain starts. However, getting hold of enough cash to purchase your first map will involve engaging in a wee bit of piracy.

Have a small battle with one of the other ships you see sailing around and if they sink before you do you'll get some money. The only danger in fighting is that your ship becomes damaged and if you take too many hits (not that you have any control over whether you get hit or not) you sink. Still, once you've repaired yourself you'll hopefully have enough money to buy that first map.

Although that's about all there is to the game it's surprisingly good fun. There's not too much challenge here, though. Simply remembering to buy your crew some food and drink periodically and replacing any deserting crew members with fresh recruits are your only real concerns in between collecting scrolls.

Even so, it's polished, well put together and entertaining. Despite its limitations it gets a huge thumbs up from me.





Pirates Cove is a joy to play. Check out the coverdisk pages for descriptions of the icons and how to play the game.

VERDICT:

A rather limited but highly entertaining game that's fun to play. It looks good, sounds fine and provides a challenge (albeit simplistic) that should keep you very happy for quite a long time indeed.

READER WARRANT

When you're sending in your submissions make sure you also give us:
1. An address where you can be contacted.
2. Details of the language used to create the game.
3. A recent photo of yourself.

The address to send your stuff into is:
Reader Games • Amiga Format
30 Monmouth St. • Bath • BA1 2BW

Everything included on the *AFCD* must have a reader warrant with it. Just cut it out off this page, sign it and send it in to us with your game and a recent photograph of yourself. A last reminder: if you don't include this warrant we simply won't be able to put your game on the CD – that means you won't be able to have it judged by other readers.

In respect of all material which forms my reader contribution to Future Publishing's *Amiga Format*, I hereby warrant that:-

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Signature: ______________________

After counting through your votes for the best Reader Game last issue (won by Steve Eaborn's excellent Compendium) we realised that with such a wealth of talent out there, some superb games were only receiving a few votes. From now on, we'll ask you to vote for the best game every six months, and we'd like you to choose from the six prize-winners chosen by Andy over those months. But don't just vote – write your own game and next time it could be you who wins loads of cash and a goody bag full of Amiga-related stuff. Go on, make our day...

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GameBusters

A-Z

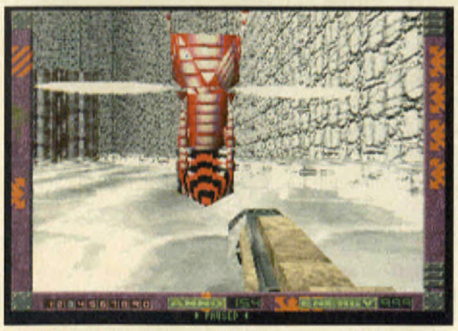
GAMING SPECIAL!

There's an old adage that goes something like: "You can't please all of the people all of the time." Andy Smith now attempts to disprove this by presenting an A-Z of games tips. That's a tip for every single letter of the alphabet, don'cha know...

A — ALIEN BREED 3D II

If you fancy infinite life on this excellent game then simply play up to level two and get killed by the red robot that's very tough to beat. Instead of exiting the game, do not touch any keys or press the fire button on your joystick – leave the screen just as it is. The red robot and some other baddies will continue to attack you.

Now go and do something else for about 20 minutes and when you come back you should find that your energy is now reading 999 and you should be immortal. Cool eh?



Alien Breed 3D II. Handy because it begins with an A. There's a bonus here too, because that's a sort of B monster thing.

B — BOGRATS

To get infinite lives and bombs just press the Spacebar to gain access to the main controls and then type **7EVEN** and press Return. Nice.

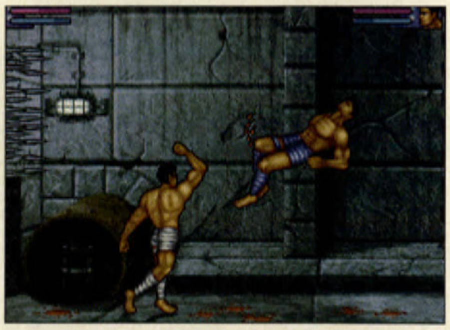


Bograts. Fine game but rather uninspired graphics.

C — CAPITAL PUNISHMENT

To access your character's special moves press the fire button three times followed by a direction. The moves vary for each player but experiment and you should be able to pull these special moves off very easily.

Try 'fire, fire, fire and down' for Corben Wedge's crushing body roll for example.



Capital Punishment. ClickBOOM's first venture into Amiga gaming and one of the best beat-em-ups for a long, long time.

D — DUNE II

Here's more of a kind of desperate, last-ditch attempt to get out of a tight spot than a decent tip. When you've completely run out of credits and have no chance of getting any more, send your harvester to the enemy camp where it'll be destroyed. You'll now get a new harvester and seven credits. Keep doing this until you've got enough money to make a decent unit to go and finish off the scenario.



Dune II. The seminal resource management wargame. Get this in your collection.

Hey! It may be desperate and it may take ages but at least it works, and that means you'll be able to win the scenario. That's what GameBusters is all about, OK?

E — EYE OF THE BEHOLDER II

Load the game as normal and select Create New Party. When the empty boxes appear, click on the top left box, then select race, class, alignment and portrait. Now go to the modify box and boost all the statistics in this order: Strength, Intelligence, Wisdom, Dexterity, Constitution, Charisma, and Hit Points.

Now you can click on strength and boost it to maximum, regardless of the limitations put on the race or class of the character.



Eye of the Beholder II. A fantastic role-playing game that will absorb you for weeks. I wouldn't have this bloke in my party.

F FLASHBACK

Here are the level codes for you:

Easy	Normal	Difficult
BACK	PLAY	CLOP
LOUP	TOIT	CARA
CINE	ZAPP	CALE
GOOD	LYNX	FONT
SPIZ	SCSI	HASH
BIOS	GARY	FIBO
HALL	PONT	TIPS



Flashback. Gallic artistic flair to the fore. Good game as well.

G GLOOM

There's a *Defender*-style arcade game in some levels where you can win extra lives in you manage to complete the level (that is, kill all the green baddies).



An easy way to complete this sub-game is to stay in the top right or top left corner of the screen and keep shooting like crazy!

H HOOK

Go to the bait and tackle shop and pick up the mug next to the candle. Then keep doing 'pick up' in the space where the mug was and you'll get all the items you need to complete the game.



Hook. A not very good film, but a slightly better game – just.

I INDIANA JONES AND THE FATE OF ATLANTIS (ACTION GAME)

On the title screen type **NIGHTSHIFT** for infinite lives. Press F9 to skip levels.

J JAMES POND 3



James Pond 3. You'll need this cheat because it's a toughie.

On the map screen type any of the following:

EVAS .... Saves the game at any time
UNCLE ROGER ..... Lets you read a message from the programmer
FORMAT .... Erases all saved games.

During play, type **NIGHTMARE** and press F10 to access the cheat menu where you'll find lots of options to play around with. Note that if you choose to play Finnius you must pause the game and press ESC to restart the level.

K K240

During play, hit Return and then type in any of the following and press Return again:

ICEMAN ... Freezes the asteroids (type it in again to unfreeze 'em)
LOADSADOSH .. Gives you an extra $100,000
SKYSCRAPER .... Have instant buildings
WIDGET .... Gives you blueprints

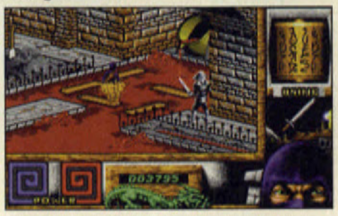


K240. A fine space resource management game. From Gremlin.

L LAST NINJA 3

Type one of these for your name on the high score table to jump to the corresponding level:

1. **SUSS**
2. **IMED**
3. **URTI**
4. **BASD**
5. **NOUS**
6. **RERO**



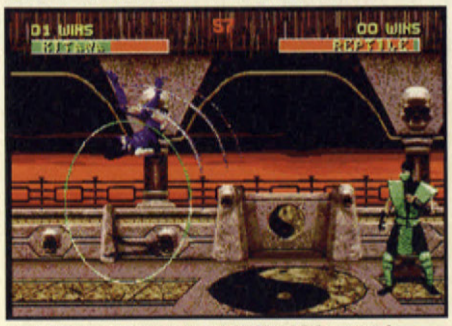
Last Ninja 3. System 3 had about milked the game as much as they could by this stage.

Also on the high score table, you can enter **'ILLBEBACK'**. This will give you infinite lives and lets you choose levels with F1-F6.

M MORTAL KOMBAT II

On the screen where you can select between Start and Options, type **FIONA**. The screen will flash green and you've turned off the blood. Type it in again and the screen will flash red and you've turned the blood back on.

Go to Options and type **ZEDWEB**. A new option – Diagnostics – will appear at the bottom of the screen. If you then select it you'll be given a whole load of new cheats to play around with.



Mortal Kombat II. Famous for all the blood flying around.

N NAUGHTY ONES

On the title screen type **JOSHUA** for infinite lives. During play, press Del, Space or Return to skip to the next level. Do not try to skip the last level or the game will crash. You might like to try this cheat on the standard ECS version, but we don't know if it works or not!

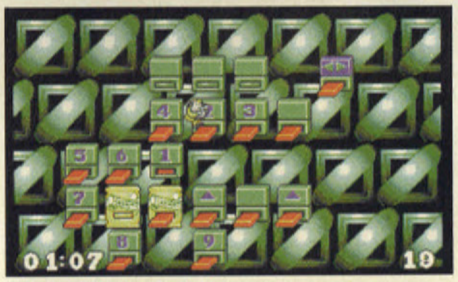


Naughty Ones. That bear's in a bit of a harumph. Probably because there's an arrow following him around.

O ONE STEP BEYOND

Here are the last 25 level codes:

75	**42289**	84	**13306**	93	**55936**
76	**27720**	85	**08847**	94	**21485**
77	**04473**	86	**22153**	95	**11885**
78	**32193**	87	**31000**	96	**33370**
79	**36666**	88	**53153**	97	**45255**
80	**03323**	89	**18617**	98	**13089**
81	**43312**	90	**06234**	99	**58344**
82	**17765**	91	**24851**	100	**58344**
83	**61077**	92	**31085**		



Colin from Quavers in One Step Beyond. A surprisingly good game considering it's licensed from a bag of corn snacks.

P PRIMAL RAGE

On the main option screen type **GETITON** and a new option will appear. Also, when swapping the final disk before a fight, press the left mouse button instead of the joystick fire button. Then if you're losing your fight, press the mouse button again for a new 'challenger'.



Primal Rage. Top beat-em-up action with dinosaurs. And a bit of blood too. Try eating the little blokes, it's a right laff.

continued overleaf →

Helping Hands

BENEATH A STEEL SKY

Dear Mister,

Help make someone happy by printing the solution to this great game please, or at least tell me how to get past the thing in the subway wall.
Mr Dunlop, Larbert.



If you're where I think you are (and a general note to all readers here – if you're stuck somewhere then try to describe your location as fully as possible, eh? It makes it much easier for me to find out where you're stuck) then do not pass the hole in the wall until you have found the light socket near the hand rail. Then use the light bulb on it and go right and quickly click on the lover right exit to escape to safety.

UNIVERSE

Dear Helping Hands,

I'm stuck in this game by Core Design. I can get across to the Gavric Homeworld and speak to the woman but she just tells me to go away. Please help.
Neil Birnie, Fraserburgh.



I think I'd probably drink forever too if I didn't have important work to do. Ahem.

Again, I'm not entirely sure where you are in the game here Neil. I'm assuming you're right at the start, in which case the woman you're on about is Silphinaa. Once you've used the door console at the northern doorway, simply talk with Silphinaa until she allows you inside. Enter and say that you don't know where you are. Read the rest of the conversation until she tells you to go upstairs. The rest is up to you. I just hope that we're both talking about the same location here!

DEUTEROS

Dear Helping Hands,

In Deuteros I need explanations.
Bartholomew Kontaxis, Athens

Well that's to the point, isn't it Bart? All I can do for that, me old mate, is give you this cheat: On the planet resource screen, press Shift and C for infinite quantities of most objects (not drones though). You might have to do this twice for some objects. Hope that's some kind of explanation for you.

LEGENDS

Dear AF,

I'm completely stuck in the game Legends. Have you got any cheats please?
Sarah Jenkins, Rhyl.

No cheats as such Sarah, but here are the level codes for you:

Chinese World	PEOJNCPC
English World	MHNJOPNC
Egyptian World	MKMJJCIB
Spacial Ship	MKLJKBLB



The Amiga Format team enjoy another fantasy weekend.

Q – QUADRALIEN

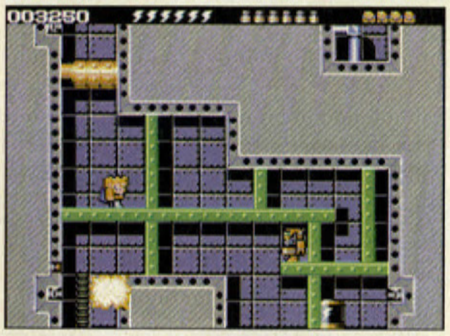
Erm, I'm a bit scuppered for games beginning with Q so I do apologise for trotting this lame old one out. Still, here you go: Once in the core you can't quit, so choose droids with good lasers like Jack and Spud. The Quadralien mother is made up of 4 separate pieces grouped together and surrounded by Earthling boxes.

The mother can only be destroyed by blowing up each box from a different direction. From the starting point there are three exits: north, east and west.

Go east and destroy the first box, return to the starting point and go north to destroy the second box. You will now have both droids to blow the remaining boxes. Go west through the one-way force field and get the other. Don't forget to keep recharging!

R – RICK DANGEROUS II

Enter **POOKY** as your name on the high score table. Now restart the game and you'll find that you've got infinite lives.



Rick Dangerous II. Murderously difficult puzzles to solve and traps to avoid – unless you've got yourself some infinite lives.

S – SUPER STARDUST

Enter any of the following as your password:

HAPPYARCADE........ Start with seven lives
MAKEMEHAPPY........... Unlimited lives
LEARNTOPLAY.......... Start on level seven
YOUARESOSAD........... Start on level 13

And here are some level codes for you to play around with:

BZZZZZZZZZZB........................
Warp 1, 25 lives and full power-ups
CXZZZXZWWQS........................
Warp 2, Special Mission and 20 lives
DWZZZWZTTLD......... Warp 3 and 15 lives
ENZZZTZALPO.........................
Warp 4, Special Mission and 10 lives
ZZZZZZZZZZZZ..... 35 lives and full weapons



Super Stardust. An extremely tough shoot-em-up made a whole lot easier thanks to the tips above. Breathe a sigh of relief.

T – TINY TROOPS

On the troop selection screen move the mouse pointer to the top left of the screen and type a two digit number (02, 04, 05 and so on) and you'll go straight to that level.

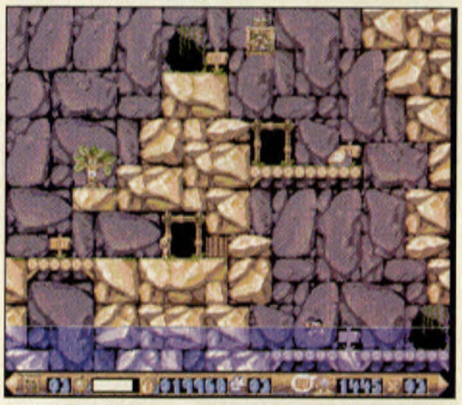


Tiny Troops. Another quality game from Vulcan, but one with some tough levels. Use the cheat! That's what it's there for.

U – UGH

Here are the last 10 level codes. Enjoy them.

60	CHANNELJUMP
61	TUNNELINGTOJAVA
62	MAURICEZATAPATIQUE
63	KENBIGGLES
64	ALIBAYAN
65	KENDOVE
66	TIDDLES
67	THENAKEDANT
68	KENSHABBY
69	ALBATROSS



Ugh. Now then, thenakedant has to be one of the silliest names for a level in a game ever. Still, what do we care eh?

V – VALHALLA III

Here are the level codes:

Level 1	MAHAM
Level 2	TIUIT
Level3	TOHOT



Valhalla III. Probably not the best graphics ever seen in a game.

WORMS – THE DIRECTOR'S CUT

Here are some interesting cheats to play around with. Type them in on the title screen.



Worms – The Director's Cut. Enough said.

JAMIE AND HIS MAGIC TORCH . . . . . . Turns special weapons on/off
PONG . . . . Turns the bouncy title ball off
NUTTER . . . . Puts land mines everywhere
MAGNET . . . . Magnetises the title ball
SUPA SHOPPER . . . When playing the game there are loads of crates filled with tons of Supa weapons, like Ming vases
GRAVITY . . The title ball is affected by gravity
BOING . . . . Changes the title ball into something else
RED BULL . . . . . . Worms can jump super-high
ARTILLERY . . . . Nobody can move
MUSIC . . . . Turns the title music on/off
PESTILENCE . . . . . Worms burn when they die
LITTLE FLUFFY SHEEP . . . Shooting any crate liberates a sheep. Unlimited fuel with super sheep
TOTAL WORMAGE . . Original Total Wormage logo on panel. Weapon names put back to original names

X-OUT

On the equipment screen, select the white bug ship and put it on the grid area. Then choose the orange laser and drag it to the face of the shop keeper. Keep clicking the left mouse button until you get $500,000.

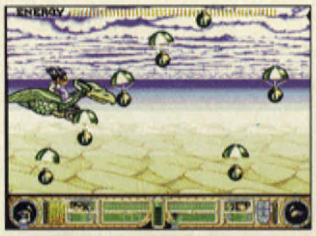
Also, insert the disk and hold down both mouse buttons until the title screen appears. When you're in the shop, hold down Help and Del for a few seconds. Now you can choose your ships as normal, but with infinite energy.

To get more case at the beginning of the game, select the smallest ship (the one at the top), the weediest laser (the orange one with the single beam) and place it on the shop-keeper's face. Now you can just hit the fire button to get a cash boost!

YO! JOE

During play, type **WELTRAUMKAKALAKEN** to get all of the weapons and to activate the following keys:

I . . . . Add lives
/ . . . . Subtract lives
Y . . . . Advances levels
Space. Transports you to the end of the flying level
S . . . . . Press repeatedly while paused for slow motion



Yo! Joe. Type in the password and then press the spacebar to get right to the end of the flying stage.

ZEEWOLF

Well, I had to finish it off with this one, didn't I?

Here are the level codes:

Level 5	**IMAGO**
Level 9	**TIBURON**
Level 13	**ARGUS**
Level 17	**MARTEN**
Level 21	**SOCKIN**
Level 25	**GANNPAY**
Level 20	**FRAMPAGE**

Zeewolf. Surely one of the most underrated games with a blue helicopter in it ever.



SECRET OF MONKEY ISLAND

Dear Helping Hands,

I have recently bought this game but am stumped by the three trials set by the pirates in the Scum bar. Please help.
Stuart Rutter, Oldham.



AAAARRGGG!!! The Bloody Secret of Bloody Monkey Bloody Island again! How many more times must I print the whole solution to this? Stuart mate, you're stuck right at the start of the game. What hope have you got? What you actually need to do is get a sword then find someone to train you and then take on the swordmaster. Then you've got to steal the idol of many hands from the governor's mansion.

Finally you've got to get a map to the treasure and then get a shovel. Then go and dig for the treasure. Anyway, because I'm in a good mood today, here's how to get started:

Chat to the pirates about attaining piratehood and then go to the door at the far right and open it. The cook will shout at you to go away. Wait for him to walk off the left of the screen, then quickly walk through the door into the kitchen. Pick up the pot and the hunk of meat, then open the door to the right and walk through it. Walk to the end of the jetty, causing the seagull to fly away. Now quickly pick up the fish before the bird comes back.

Walk back through the kitchen to the bar and then to the docks. Go back up the cliffside, past the lookout and round the corner. Now head for the circus tent. There you go, that should get you well and truly stuck! AF

Helping Hands

REUNION

Dear Amiga Format,

Have you got any tips on how to play the game Reunion?
Sam Jacobs, Aberdeen.



An old AF team's reunion. Can you spot ex-editor Damien Noonan? Or Bob Wade?

Here you go Sam.
At the research screen begin the projects Mining Robots and Satellite. Place six mines and five derricks, because the more mines and derricks you have the more money you'll make.

Each planet can contain a maximum of nine mines with one Mining Robot per mine. This doesn't apply to derricks, however. As soon as the Mining Robot has been researched, buy seven others and place them in the mines. Buy three satellites and send one to the moon Apollo to discover that it contains Raenium. The most important ores are Detoxin, Enorgon and Texon. Send another satellite to Amnesty 2. When this satellite is destroyed it triggers the research of a new launch average.

As soon as you get the chance, research the V.O.S. project. Answer resident's calls as soon as possible.

CAR-VUP

Dear Helping Hands,

Don't ask why, but I've been playing the really old game Car-Vup. I was getting so frustrated by it that I thought I'd write and ask for some cheats or tips. Any chance?
Jonathan Price, Middle Wallop.



Car-Vup. A surprisingly good game that can be a little tough to finish.

Don't worry about it Jonathan,
loads of us are playing old games these days and, as I recall, Car-Vup wasn't that bad at all. And to make your day, here are some cheats. Type them in on the high score table.

RJTOONE . . . . Gives you infinite lives
BUMPER . . . . Gives you infinite bumpers
PUSSYCAT . . . . Gives you nine extra lives
BARMY CAR . . . . Gives you an extra 1,000 points
WOOAARRGGH . . . . Gives you faster turns
WHOOPSIE . . . . Gives you a level skip
ARNIECAR . . . . Gives you 100,000 bonus points

SEND US YOUR TIPS!



If you've got some hints, cheats, tips or general good advice on any Amiga games – especially some of the newer ones like Uropa2, Bograts or whatever, then don't keep 'em to yourself – send 'em in so we can pass 'em onto other gamers who might be having more problems than yourself.

Also, if you've got a query about a game (and, no, I don't really mind people asking about The Secret of Monkey Island), then drop us a line and we might be able to answer it in Helping Hands.

HELPING HANDS • Amiga Format
30 Monmouth Street • Bath • BA1 2BW

GAMING SPECIAL!

An Interview with... Austex Software



We've been raving about Uropa2 for ages. Now Amiga Format brings you an exclusive interview with the game's designers.



Uropa2 starts off quite slowly but it soon builds up.

Who are the members of your team and how did you come to form Austex?

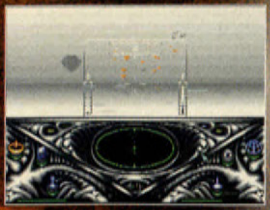
Paul: Austex Software only has two members, Stephen Smith and Paul Goulding. We have both been Amiga owners since 1987 and, with two other members, formed our own demo group in 1989, called Aushax.

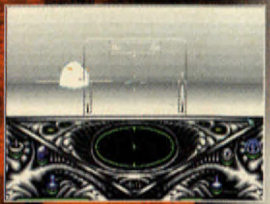
We coded about four demos and then decided to do a compilation disk with a number of demos, some utilities and a Freeware game. This compilation disk was completed in 1990 and was called "Genesis". The game was *Nebula* and was later given some pretty good reviews in the Amiga magazines.

> **"We became very annoyed with a number of people who we thought were responsible for the Amiga's downfall."**



This screen shows your Hovar, which leads into...





... you flying around on the surface. A precursor to Uropa3D perhaps?

As we completed the Genesis collection, Stephen and I decided to leave the demo coding scene and commence work on a commercial project. As such, one of the demos on the disk was titled *End of Aushax*. It was the death of Aushax and the birth of Austex Software.

So, it was early 1991 when we first began planning the game we now call *Uropa2*. We had a talented graphics artist for *Uropa2*, Bruce Abel, but he isn't a member of Austex Software.

Uropa2 is a very complex game containing a multitude of genres. Did it evolve as you progressed or did you work to a set design?

Paul: A set design? I wish! The game we planned and the game we released only had one thing in common – they were both 3D isometric. Apart from that it's completely changed.

Stephen: It was originally going to be called "Ulterior Colony" and be based on a murder investigation aboard a space freighter called Vindicator. At the beginning of 1991 we had written down plans for the game and needed a graphic artist.

We eventually approached Bruce Abel who agreed to do the graphics for us. He started doing some but wasn't too keen on doing isometric stuff. We wanted colonists drawn in Iso3D to roam around the freighter, but what we ended up with were robotic looking creatures.

Bruce was starting to add his game input which was making it difficult to stick to the original plans. As the design started changing we ended up with gameplay that was boring, repetitive and difficult to code for. At that time, around 1994, the solution was to modify the game to incorporate features from the original, *Uropa1*, which we completed a number of years before.

This made a tremendous difference to the whole project and allowed us to finish the game.



Austex Software's Stephen Smith and Paul Goulding, yesterday – or is it the other way around?

What inspired Uropa2?

Paul: Well, that's difficult. I suppose the original *Uropa* which we both coded on the BBC and Commodore 64 during '85 & '86 was an inspiration. The inspiration for the original *Uropa* was *Elite* on the 64 and BBC. I still think *Elite* was more ground breaking at that time than the *Doom/Quake* clones are today.

But *Uropa2* is nothing like *Elite*, so I suppose there have been a number of games that have inspired parts of *Uropa2*, but nothing stands out as having a significant influence. Has that answer confused everyone?

Stephen: Yes! Originally, with *Uropa1*, I wanted to write a game where you could travel about a planet via some sort of vehicle or ship and then go underground and explore various cities. *Elite* was great but I wished that you could go down and visit the planets. *Frontier* sort of fixed that, but you couldn't go down and wander around inside buildings.

Uropa2 allows you to fly about the moon's surface and then visit a base and wander around inside.

However, total freedom to go anywhere on the surface and have puzzles to solve became a coding nightmare, so the solution was to make it mission based.

Uropa2 is huge. How long did it take you to develop it?

Paul: Oh, don't bring this up, it has taken far too long. As I mentioned earlier, we started planning the game in early 1991. We commenced actual coding of the game in late 1991, so if my mathematics is correct, it's taken us about six years to

complete it. It was originally planned to be ready sometime in 1994 but we kept changing it, and then it required more features to be brought back up to date. This dragged it on a bit, and in early 1996 we became very disappointed in the Amiga scene and gave up on it for about six months.

After further thought, we decided the only chance for the Amiga to survive was for software developers to keep supporting it so we finished the game.

Stephen: Also, the Shareware release proved too difficult to manage, so Vulcan came to rescue us. I suppose a lot of people would be asking, "Why the hell did it take six years to write *Uropa2*?" I've asked that question myself quite often.

One of the major reasons for taking so long is that we both have other jobs and *Uropa2* was a part-time programming project.

What is your favourite element of the finished game?

Paul: It's not a *Doom/Quake* clone or a *Red Alert* clone. I really like *Red Alert*, but those genres of game are very common at the moment and *Uropa2* is very different to either one. We also put in a hell of a lot of attention to the fine details.

There are a lot of aspects to the game that most people won't see unless they play around and try doing things that aren't necessary to complete the mission objectives. Little things like burning a few colonists to see what happens!

Stephen: I like the duality of the game with the base and surface sections. I think that it breaks it up from just being one style.

What other Amiga projects have you been involved in?

Stephen: I worked on a number of projects at the university I worked for. These included a VHF radar system, of which I designed and programmed the A/D card, firmware and radar software.

What is the Amiga scene like down under?

Paul: A bit sad really. There are still dedicated Amiga shops in about four or five of the major metropolitan cities, but out in the regional cities like Townsville there are none.

I guess there are still a number of enthusiasts around and we still talk to them on IRC, but it needs a major injection of enthusiasm from Gateway 2000.

Has it been difficult developing for the Amiga during these turbulent times?

Paul: In the early days it was very exciting and this gave us the push we needed, but once Commodore crashed in 1994 it did become difficult. We became very annoyed with a number of the people who we thought were responsible for the Amiga's downfall. You'll be able to guess who by playing the game as they get a few disguised mentions.

The surprising part is the renewed interest in the Amiga over the last six months. Companies like Vulcan, phase 5 and others are pushing it, which is good to see.

What would you like to see happen to the Amiga?

Stephen: The Amiga obviously needs an overhaul, in both the OS and hardware. The OS is all that the Amiga has going for it at the moment, though. When the Amiga came out, its custom chipset astounded everyone. The push nowadays is to go with the flow and use "off the shelf" parts. However, an interesting trend at the moment is that some companies are just designers and leave the actual chip-making to other known companies.

I can't see why this couldn't be done with the Amiga – design a new chipset and get some large semi-conductor manufacturer to produce them. This happened with Chromatic Research and their MPact chips.

Paul: Become a new, modern, powerful and wonderful computer again. I still remember the days when we could look at other computer owners, especially those with PCs, and really pity them.

The Amiga was better in every feature back in the late 80s. There are still some features about the Amiga that are superior.

What is the best part about being Amiga developers?

Paul: Not having to code on a PC. Windows is the most bloated piece of software I've ever used.

Stephen: I like the Amiga and I like coding for it. The fact it has survived two bankruptcies is testament to its original concept. I've never coded on the PC and never will.

What advice would you give to other people who want to develop Amiga games?

Paul: Don't code in 100% assembly language. When we coded the demos we were quite happy to use assembly language and hit the hardware. However, games are an application that should obey all the operating system rules. Such a large application is too difficult and time consuming to code in assembly. The next project we do will probably be an 80/20 mix. 80% will be C, C++ or a similar high level language and the remaining 20% will be assembly.

Make sure you find some dedicated beta testers that aren't just trying to get hold of a game for free. We had a few testers who were excellent while others basically told us nothing and just wanted free games (may their chooks turn into Emus and kick their dunny doors down). Look after your good ones and get rid of the useless ones.

Stephen: My advice would be to never program a game part-time, especially nowadays. Also, make sure you have a team of people organised so that everyone knows exactly what they're supposed to do.

Paul: If you're writing a game part-time it will take you take you at least two to three years to complete.

Computers are advancing rapidly and the base computer at the time of release will probably be the mid-range computer of today.

> "I still remember the days when we could look at computer owners, especially those with PCs, and really pity them"

What are your plans for the future?

Paul: Play other peoples games for about six months, and then plan and commence another project. How does *Uropa3D* sound?

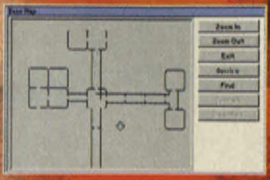
Stephen: The idea for *Uropa3D* has been around for quite some time. It would be a *Quake2*-type game but with a *Uropa2* theme to it, although it would be more mission based. I have some plans for hardware and software that require a lot of work, which I'm looking forward to.

Do all Australians drink XXXX beer and call women Sheilas?

Paul: Well, I drink Sub-Zeros and say "Please don't hurt me, mistress."

Stephen: Calling women Sheilas doesn't happen much now, except perhaps after consuming prodigious amounts of alcohol...





The map becomes increasingly useful as the missions get harder.





Without Vulcan, Uropa2 would have remained Shareware.







Uropa2's split between interior and exterior scenes means that things are always exciting.

PD Select

Dave Cusick once more trawls through the PD mailbag to bring you another helping of affordable excellence.

MINI TOWER PROJECT

By: S Benton
Ware: Share
PD Library: author
No of disks: 1
Price: £1.75 inc P&P
(cheques payable to S Benton)

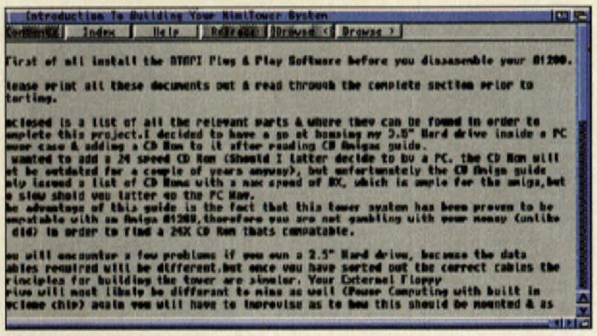
The A1200 is a beautifully designed piece of kit, a completely self-contained machine that's only slightly bigger than a standard desktop PC keyboard. Self-contained, that is, until you add something other than a hard drive or extra memory. You'll suddenly find your computer desk becomes covered in bits of kit and a mass of tangled wires.

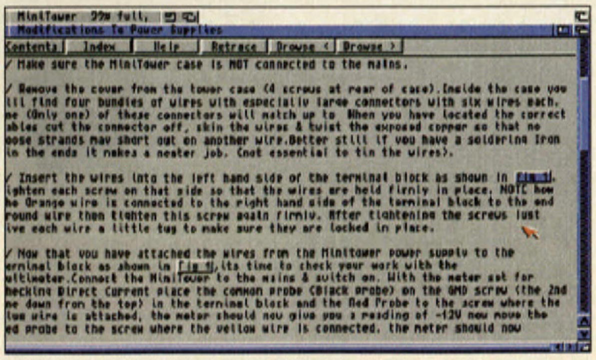
The obvious solution to the problem is to remove your A1200 from its compact little case and stick it inside a standard PC tower case. Not only does this allow you to considerably expand your machine without cluttering your desk, but it also offers the possibility of powering your Amiga system with a big, beefy tower PSU instead of through the weedy A1200 power brick.

Of course, you'll know all this if you happened to buy issue 99, which contained *AF*'s comprehensive guide to installing your machine in a tower case. If you didn't buy that particular issue, or if you're simply keen to read as many different guides and draw on as many different peoples' experiences as possible before you embark, then this could well be worth investigating.



Transform your A1200 into a sleek and stylish tower using *Mini Tower Project* – if you missed our definitive guide in *Amiga Format 99*.





A detailed AmigaGuide document about converting your A1200, along with CD drivers and several colourful diagrams.

The disk contains an AmigaGuide file which, typographical errors aside, paints a reasonably clear picture of the conversion process, thanks in part to a series of colourful diagrams.

It also contains a set of CD drivers, which should be installed prior to commencing the conversion.

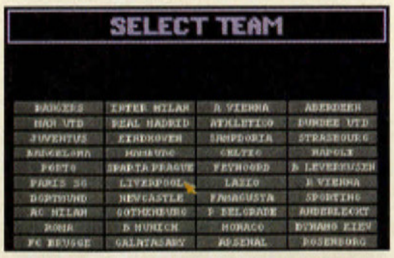
EUROPEAN PLAYER MANAGER

By: Gordon Miller
Ware: demo of Licenceware game
PD Library: Norwich PD
No of disks: 1
Price: 65p + 50p P&P

Over the last week or two I've been reading Alex Ferguson's diary of the 1996-7 Championship campaign, *A Will To Win*. It makes interesting reading, offering a great insight into just what is demanded of a manager at the top level. The game of football has changed dramatically over the last few years, something which can be attributed to all sorts of factors, ranging from the introduction of all-seater stadiums to the injection of money from Sky television.

Whether all the changes have been for the better is a matter which is very much open to debate, but the result is that in order for a manager to be truly successful, it's not sufficient for him simply to have a brilliant football mind – a degree of business acumen (not to mention a knowledge of the way in which the media works) certainly wouldn't go astray.

Many journalists believe that the expansion of the European Champions League this season points to a future European Superleague. That's not an opinion I personally share, and it's certainly not something I believe many fans would like. Supporters would have to cover colossal distances to support their team away from home, and quite apart from the prohibitively high cost of doing so, friends of mine who've followed United all around Europe will testify that their experiences haven't all been good (remember how many got injured in Oporto last spring?). Besides, many local rivalries make for terrifically



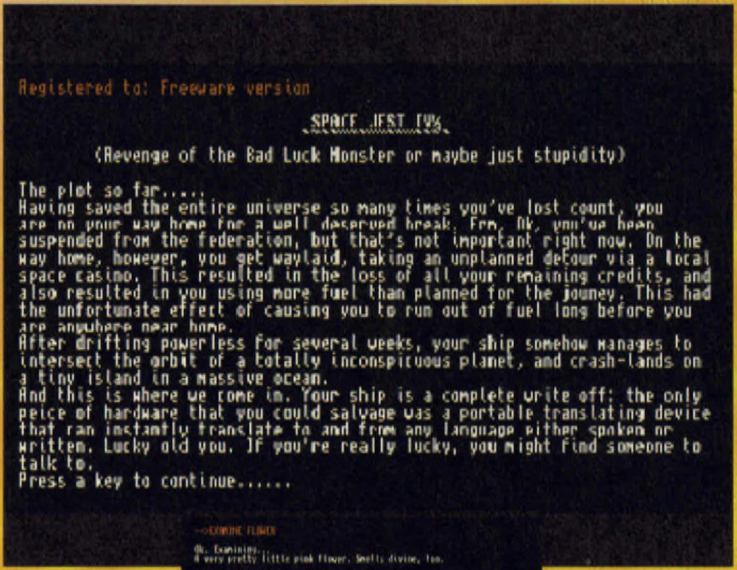


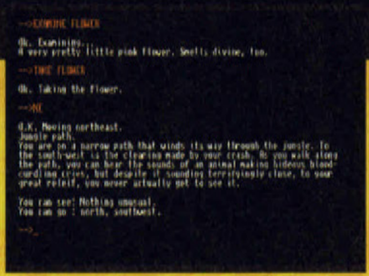
Choose your team (top) then work your way to European glory using the many options available (above).

PD selection of the month

Space Jest IV

By:	Simon Champion
Ware:	Free
PD Library:	Classic Amiga Software
No of disks:	1
Price:	£1 + 75p P&P





OK, so it doesn't look as sexy as *Myst*, but it'll still provide hours of retro-style adventuring.

Back in the early 1980s when my family purchased our first computer, an Acorn Electron, the computer games industry was still in a fairly embryonic state. Most games programmers were people who beavered away in their bedrooms in their spare time, a situation which is a far cry from the multi-million pound team efforts of cutting-edge game development today. It's always nice to think back to those heady days of home computing, though. *Space Jest IV* is a text adventure, making it very much a reminder of how things used to be before fancy graphics cards brought stunningly realistic images to personal computers. The first adventure game, *Adventure* (aka *Colossal*, or *Colossal Cave*), was created by William Crowther and Don Woods in 1976. It was written in Fortran and occupied more than 250K, a then astronomical amount of system space, but it served as the prototype for every text adventure created over the next decade or so, and it's this traditional model that *Space Jest VI* is based upon.

The plot finds you in a space casino, suspended from Federation duties, stony broke and unable to afford the fuel necessary to complete your journey. Nevertheless, you blast off and end up drifting aimlessly for several weeks before you crash-land on a small island on a strange alien world.

For a text adventure to be really playable then three things are necessary. Firstly, decent descriptions of locations are required because these set the scene for the player, who has to be able to picture things in his mind's eye. Secondly, there must be a reasonable number of locations, connected together in a sensible way. A game needn't have hundreds of locations, but it's not going to take a player long to complete a game with less than 10.

Thirdly, and most importantly of all, the game must understand a wide variety of commands, or must at least be accompanied by a list of obvious commands if there is any chance that a player won't be able to make the computer understand what they want to do.

Happily, *Space Jest VI* fares well on all three counts. It won't appeal to modern gamers like joystick nuts who are never happy unless they're obliterating hordes of texture-mapped polygons in 65,000 colours to the accompaniment of a pumping techno soundtrack, but it'll certainly provide a welcome change of pace for old-timers, a category I tend to include myself in these days, despite my relatively tender years.

Forget about dodging the ninja death-monkeys on level 6 of the latest blast-fest. Just stick on your favourite CD and immerse yourself in *Space Jest VI* for a few hours.

---

entertaining games of football, whereas not every clash of major European teams is of sufficient interest to attract a decent crowd – witness Newcastle's visit to Barcelona, when the Neucamp was barely a quarter full. Anyway, I'll clamber off my soapbox now.

If you're a football fan who is in favour of a European Superleague, or if you'd like to see how it might work out, then you would do well to have a look at *European Player Manager*, a new and improved version of 5th Dimension Licenceware's *British Manager*. While it could scarcely be described as being at the cutting edge of computer football game development, being more on a par with the original 8-bit *Football Manager* than the likes of *Championship Manager*, it's nevertheless quite good fun.



"...and Newcastle thrash Man Utd seven-nil in the UEFA cup final..." Ahhh. If only.

Although I had to rename the disk before I could get the game to run, actually getting things underway and starting a new campaign is quite straightforward. You pick one of forty European teams, choose your kit and then it's on into the football season.

You pick your first team from the squad of eighteen players who are at your disposal and send them into battle in three competitions – the league, a European knockout cup and the UEFA cup. The two cup competitions have curiously reverted to one-legged affairs, and the European Superleague actually consists of four divisions of ten teams but, as you'll realise very quickly, realism isn't what *European Player Manager* is all about. If you can put up with watching United lose 5-0 at home to Napoli in front of 23,300 fans when £400,000-rated Peter Schmeichel has an off-day, then you'll enjoy this (the one up-side here being that tickets for the North Stand are just £6 each...).

Sophisticated it may not be, but it's quite a good laugh.

BURTON BIRD

By:	Matthew West
Ware:	Licence
PD Library:	F1 Software
No of disks:	1
Price:	£3.95 + 75p P&P

Burton Bird is a competent platformer with some attractive graphics and gameplay, which will either have you glued to your screen for hours or hitting the screen within minutes, depending on your patience. *Burton Bird* actually won a Reader Games award last year in this very

Continued overleaf ➡

magazine (*AF92*), but I have to say I'm far from enamoured with it. Blending elements of *Breakout* with classic platform ideas, it might be a classic were it a little bit less frustrating.

Your task is to collect various pieces of fruit which have been scattered around 87 different levels, all the while competing against the clock. This is one of those games which you will either love or hate, and I'm afraid I fall into the latter camp. In fact, I have to report that the only thing I'd change about my original review of *Burton Bird* was my comparison of its frustrating gameplay with watching the long-maligned Andy Cole play at Old Trafford, something that's become incredibly enjoyable over the last few months. *Burton Bird* remains shockingly irritating.

Yes, the graphics are superb, lending the game a supremely console-like feel which is very appealing (although the music is appaling and only serves to help wind me up). Yes, if you persist with it you will eventually crack the control mechanism and you will doubtless find the game very rewarding indeed. But no, I don't like it. Sorry.

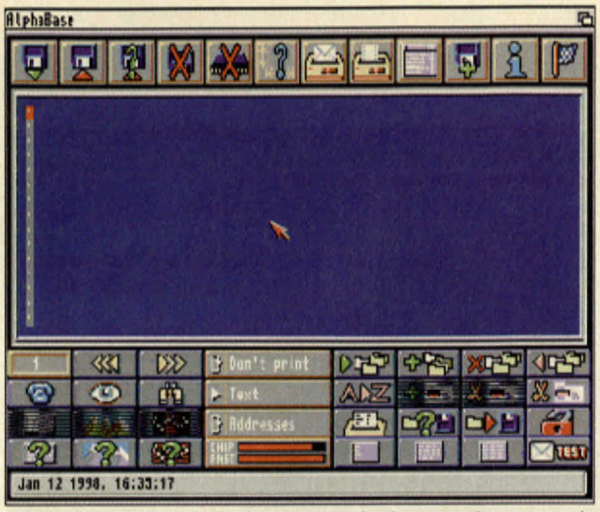
ALPHABASE V1.1

By:	Mark Schmidt
Ware:	Share
PD Library:	Classic Amiga Software
No of disks:	1
Price:	£1 + 75p P&P

I have a moan – the address section of my diary isn't big enough. As a consequence, when someone gives me their new address I end up scribbling it down on any old piece of paper I can get my hands on. This situation hasn't arisen because I have an unusually large collection of friends, relatives and contacts whose addresses I need to write down – it's just one of those things.

My mother's address book is a colossal tome, but it's still not big enough for all the addresses she has accumulated. Any given address book will never be large enough for all the addresses that need to be recorded in it. It's one of life's rules. Just as, no matter how ahead of schedule you begin writing a PD review column, it will never be finished until the morning it has to be sent to the publisher.

The need for an organised system for keeping track of scores of names and addresses is probably the reason why attractive address book/database programs seem second only in popularity with programmers to *Breakout* clones.



Lots of colourful icons make the task of creating your database a lot easier in *Alphabase*.

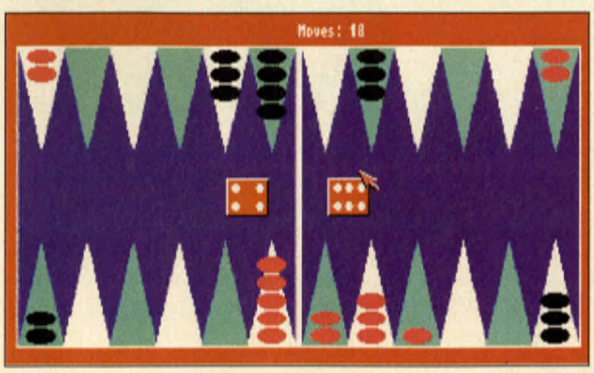
It's just as well, therefore, that *Alphabase* is actually quite a powerful program. It also has an an extremely intuitive interface that makes learning to use the software a very simple task.

Useful features include the abilities to attach comments, pictures and sounds to records in a database, to have up to 99 fields per record, to have fields containing values obtained through mathematical calculations using numbers from other fields and even to search an address book to see if any of your friends' birthdays fall on a given date.

The only criticism I have of *Alphabase* is that the screen display is rather glitchy, with updates being performed perhaps a little too occasionally for comfort. That niggle aside, *Alphabase* is more than capable of keeping track of all your addresses, and performs as a reasonably powerful database program to boot.

This shareware demo, however, restricts the number of records in your databases to 20. Registration for the full version, which of course is not limited in this way, costs £10.

The computer plays a fiendishly cunning game of *ProGammon* (and no, of course it's not just 'cos I'm rubbish at it).



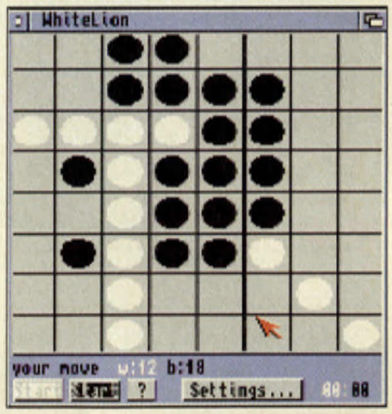
BOARD GAMES

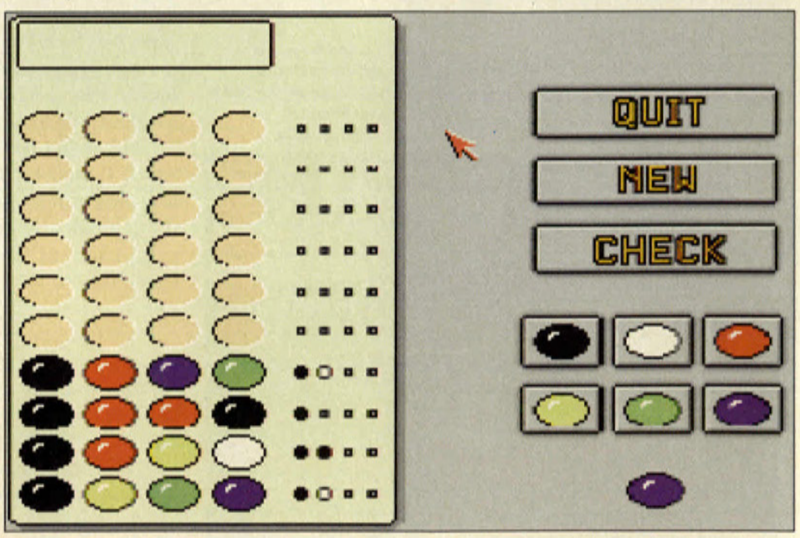
By:	Various
Ware:	Free
PD Library:	Classic Amiga Software
No of disks:	1
Price:	£1 + 75p P&P

Unsurprisingly, this disk contains three computerised versions of board games. First up, there's *White Lion*, a one-player *Othello* clone. For those of you who've not played *Othello*, it's a game played on an 8x8 grid with reversible black-white counters, with one player taking each colour. The objective is to enclose a line of your opponent's pieces within two of your own, whereupon they are flipped over from black to white, or vice versa, so that they become your colour.

The computer plays a mean game (although I never was that good at *Othello*!), a fact probably best explained in the Readme.doc, where the author discusses the various Artificial Intelligence algorithms which helped him develop such a fiendishly challenging opponent.

Flustermind is a well produced version of the old *Mastermind* peg game. The computer selects a sequence of four pegs, using pegs of up to six different colours, and you have ten attempts at guessing the sequence. After each guess the computer tells you how you did by using its own pegs. A black peg means





Computer versions of classic boardgames, with the brightly-coloured *Flustermind* (above) and the very tricky *White Lion* (top).

one of your pegs is the correct colour in the correct position, whereas a white peg means one of your pegs is the correct colour but is in the wrong place. You have to work out which of your guesses are correct and which are wrong. It's quite a challenging game, and it's really good fun.

Finally, there's *ProGammon*, a well-presented *Backgammon* conversion. I'm absolutely pathetic at *Backgammon*, but the author reckons the game is pretty tough to beat and I certainly wouldn't want to disagree.

Between them, these three games should keep even the most gifted of board game players occupied for some time. Frighteningly absorbing.

AMONOPOLY V1.6

By:	Al Metz
Ware:	Free
PD Library:	Norwich PD
No of disks:	1
Price:	65p + 50p P&P

As one of the most famous board games in the world, *Monopoly* has made its producers, Parker Bros., an absolute mint. It was originally invented by a chap called Charles Darrow in Pennsylvania during the Great Depression, and the original American version of the game featured place names from Atlantic City, New Jersey. Parker Bros. acquired the rights from Darrow when demand for his game started to outstrip his ability to manufacture *Monopoly* sets by hand.

Nowadays, *Monopoly* is sold in twenty-five countries around the world in fifteen different languages. There are licensed arcade machines and computerised versions of *Monopoly* too.

AMonopoly is a truly international program in that, as well as the original American board, it lets players use the British and Australian boards. The program faithfully recreates the *Monopoly* experience for up to four players and it's certainly very polished.

In addition to the game itself and the accompanying Readme.docs, the disk even contains the official *Monopoly* rules, which, of course, the program strictly adheres to. In saying that, several optional rules can be toggled on or off from the main menu, so you're not necessarily stuck with rules that you don't really like.

Although I've never seen the attraction of playing computerised versions of board games (for a start, you can't cheat by stealing money from the banker when he or she nips to the toilet) this is undoubtedly one of the best attempts at producing a playable and accurate board game conversion ever to grace the public domain.

Fans of the original should enjoy it, particularly if they fancy a game but don't have anyone to play against, because the computer can provide up to three opponents for the solitary monopolist.

BLITZMAP

By:	Yerrel Kasmin
Ware:	Share PD
Library:	available from author
No of disks:	1
Price:	£2

Writing computer games is a relatively thankless job. Unless you happen to work for a large software publisher, the chances are you'll have to release your game as Shareware or Licenceware, in which case you're extremely unlikely to make much money out of it at all.

As a consequence, games are often labours of love for their authors, a personal project undertaken for satisfaction and personal enjoyment rather than for any commercial gain.

Indeed, I often feel slightly bad about criticising games upon which authors have clearly lavished great amounts of time and effort... but then again, it is my job to sort the wheat from the chaff.

Not only is writing games a thankless task but it's also quite a hard one. Even a fairly simple game can take several weeks to program and playtest, and bugs can be quite hard to trace and eliminate, especially if the source code has grown in a higgledy-piggledy manner rather than following a pre-planned course of development. Consequently it's nice to see that someone has taken pity on the poor programmers who toil long and hard to bring merriment to so many.

BlitzMap is a map editor, designed to make life just that little bit easier for game creators, regardless of the language they are coding in. With a relatively straightforward interface, it's a far more usable tool than the basic map editors so many programmers are forced to cobble together when creating their own games. I know this from bitter experience, having worked with a pretty unfriendly map editor making maps for the one game I've been involved in creating (the aging *MooseDrive*, for those who care).

BlitzMap is a Shareware program, although given that registration appears to cost a mere £2, there's probably little reason to seek out the demonstration version when you could just leap in and buy the registered version instead.

The demo has all save options disabled and didn't want to load the example map files provided, although it was happy enough to load palettes and shapes with which to construct new maps. This could well be a godsend for programmers everywhere.

Solve all your map-making hassles with *BlitzMap*, a game creators dream.



Top 10
Public Domain titles

1. PROTOTYPE AGA
2. HARD DRIVE UTILS
3. BATTLESCAPE AGA
4. SCHOOLBOY SIXES
5. WHOOLS
6. CLINDEX
7. GRAFIX TUTORIAL
8. VIRUS Z
9. BOGUS
10. EXPLORING THE WORLD

F1 Software, 1 Lower Mill Close, Goldthorpe, Rotherham, S. Yorks, S63 9YB. Tel: 01709 888127. Website: www.ware5d.demon.co.uk

GET YOUR DISKS FROM:

MR S BENTON
69 Stroud Avenue, Short Heath, Willenhall, West Midlands, WV12 4EB

CLASSIC AMIGA SOFTWARE
11 Deansgate, Radcliffe, Manchester, M26 2SH. Tel: 0161 723 1638

F1 SOFTWARE
1 Lower Mill Close, Goldthorpe, Rotherham, South Yorkshire, S63 9BY. Tel: 01709 888127 E-mail: phil@ware5d.demon.co.uk

YERREL KASMIN
Aurikelstraat 65, 1032 AS, Amsterdam The Netherlands.

NORWICH PD
43 Motum Rd, Norwich, Norfolk, NR5 8EH. Tel: 01603 504655

ANY OTHER GOOD PD LIBRARIES

SERIOUSLY AMIGA

In-depth reviews of hardware and software that you can trust.


Ben Vost

Though it may be warm by the time you read this, the time machine that is *Amiga Format* Towers is in the grip of an extremely chilly spell. Still, we have been kept warm by the welcome news that Amiga Inc. have finally admitted that they will be keeping OS 3.5 on the 68k while actively supporting the PPC. That, and of course, playing *Doom* in its many incarnations.

Most of you who actually spend any time in email correspondence with me will already know my proper email address, but I still get a lot of mail forwarded to me from the standard amformat address.

If you want to speak to me directly, about something I've written, ideas for the magazine or comments about the CD, then email bvost@futurenet.co.uk See ya!

AMIGA FORMAT'S REVIEW POLICY

...is very simple. ***Amiga Format*** is staffed by some of the most experienced Amiga users in the world and what we say goes. OK?

WHAT OUR REVIEW SCORES MEAN

90+%	The crème de la crème. Only the very best, most versatile and effective products are awarded an ***AF Gold*** – the most highly prized rating there is.
80-89%	These products are very good, but there are minor flaws or areas that could be improved upon.
70-79%	Not a bad product but quite possibly one that needs a serious update.
60-69%	Average products with somewhat limited features and appeal. Products in this category tend to be flawed.
50-59%	Below average products which are unlikely to impress your mates or your wallet. Avoid.
40-49%	Overwhelmingly poor quality products with major flaws.
Under 40%	The absolute pits.

64 MODEM ROUNDUP

The fastest and best-looking modems you can get for your Amiga, reviewed and selected by **Ben Vost**.


A big pile of hardware, but which is the best? We judge the pick of the modems.

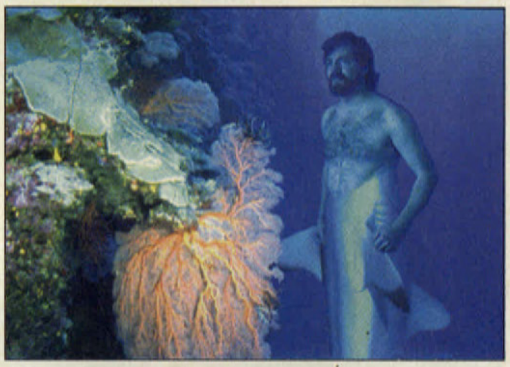
66 D PAINT

Ben Vost has a brush with the re-released version of the Amiga's premier paint package.


A fantastically fishy *DPaint* image.

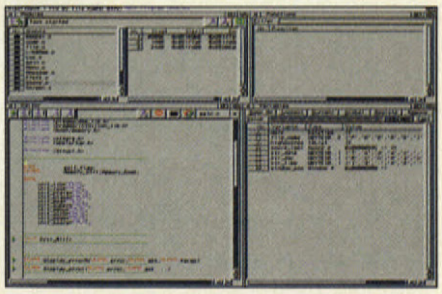
68 INTERVIEW WITH POLYMORPH

Jason Jordache talks to Steve Greenfield about running a business using Amigas.


Picture manipulation using Amiga software and hardware with superb results.

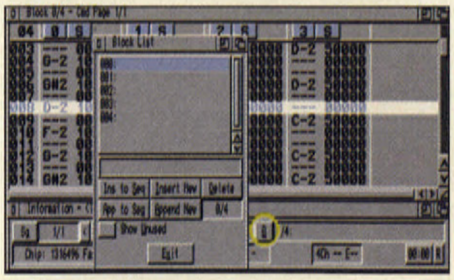
70 HISOFT C++

A new compiler language from software giants HiSoft really must impress **John Kennedy**. Mustn't it?


Is this the future of Amiga games development?

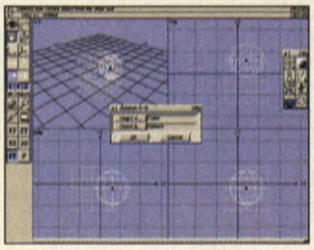
72 LONG TERM TEST – OCTAMED

Stephen Smith samples the classic Amiga music package.


Looks quite dull, sounds absolutely amazing.

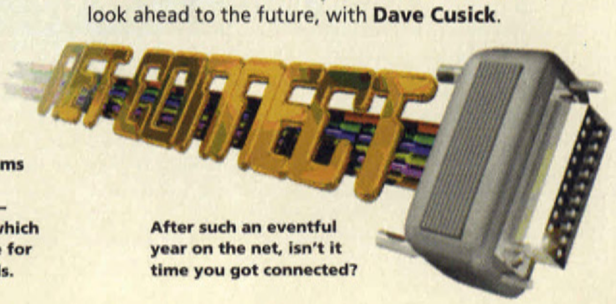
74 WORKBENCH

All of your technical hardware and software problems solved by **Graeme Sandiford**.


3D programs or CAD packages – find out which is suitable for your needs.

78 AMIGA.NET

A look back over the last year on the net and a look ahead to the future, with **Dave Cusick**.



After such an eventful year on the net, isn't it time you got connected?

Modem Roundup

Four bits of kilobaud craziness just begging to be looked at. Who do we send? Ben Vost, of course.



Modems, modems, modems. Online stuff, eh? So complicated you need a PhD to understand it all and a Masters to be able to change all those S registers and actually understand the Hayes command set.

Do you remember when modems actually had dials and dip switches to change their settings, and the best you could expect speed-wise was a massive 1200 baud? Well, I do, and these modems we're getting now are some of the simplest bits of kit you can add to your Amiga. Hard drives? You still need to know whether it's a master or slave drive, or what SCSI ID it has and whether or not it needs terminating.

With modems you don't need to worry about any of this. Just plug it into the power, plug it into your serial port and plug it into your phone point. What could be easier? Well, the only thing that could be is being able to choose between all the different manufacturers and models and that's where we come in.

So what do you need to look out for in a modem? Firstly, who's selling it? Is it a company you trust? Next thing is whether or not it is "flashROM upgradable".

This is especially important for 56k modems since the two competing standards – K56Flex and x2 – are going to be replaced this year with a single ITU-T standard, much like the existing V.34 standard. You'll need to be able to easily upgrade your modem in order to be able to do this.

K56Flex seems to be better supported by ISPs in the UK, although it may be a very different scenario elsewhere in the world.

Lastly, and probably least importantly, does your modem support "voice" functions?

Origo 33.6k

The first modem on the block is the Origo 33.6. I've never heard of Origo before, but this doesn't really matter that much. They certainly seem to have done their homework when it comes to getting phone company approval for their modem, based on the Rockwell chipset, with the bottom of the box absolutely covered with telco logos. As such, it's an easy choice for those on a real budget.

Like most other modems these days, this one has been made in Taiwan, but the build quality is quite high as the modem feels pretty solid.

For those that like them, this modem has an on/off sliding switch at the side and the usual connectors at the back (power, speaker, mic, serial, line and phone – both RJ-45).

Performance-wise, it gives about what you'd expect from a 33.6k modem, roughly 3k a second on a good ftp link and the web speed is also about average. If you already have a 28.8k modem I wouldn't recommend you upgrade to this because there's just too little performance difference.



Supplier: **Gasteiner**
(0181) 345 6000
Speed: **33.6k** Voice: **Yes**
FlashROM: **Unknown**
BABT approved: **Yes**
Extras: **None**
Price: **£68.15**

This unit just screams "OEM!" at you. Its nondescript case is bland and uninteresting.

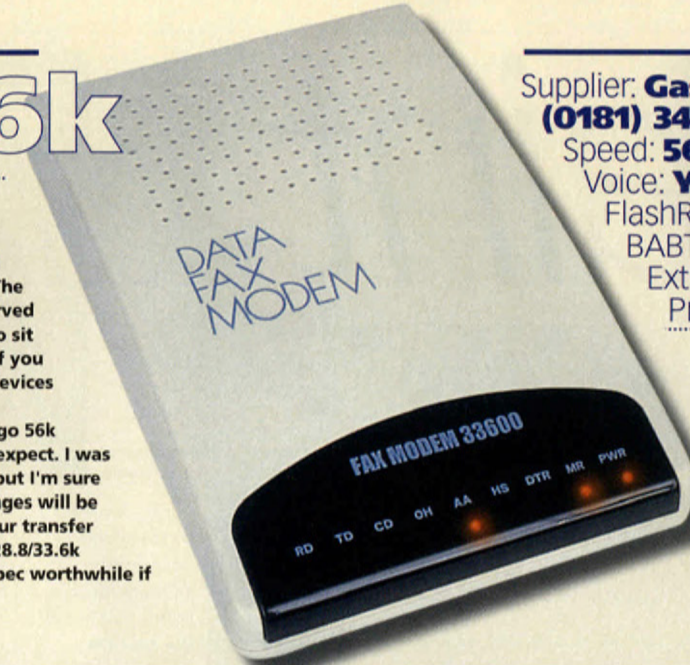
80%

HOW FAST WAS I GOING?

The thing that's most confusing about modems these days is what the difference is between your serial port's speed and the speed of the modem itself. For best performance you should set your serial port to the fastest possible speed it can achieve in order to get the best from your modem, but this can prove to be a problem with the built-in serial port found on the A1200 and other Amigas. The best, stable, performance you can expect from it is 38,400 baud, but this isn't really enough to get the best from the new 56k modems. In fact, for speeds faster than 28.8k you'd be better off investing in a faster serial port, such as the Surf Squirrel/Whippet, the Hypercom or Port Plus or a Multiface card, for those with a big-box Amiga. These gizmos will allow you to set your serial port at a much higher speed, such as 115,200, 230,400 or even 460,800.

While anything more than about 115k is a bit of a waste of time it can't do any harm, but don't expect to see much higher transfer rates just because you've set your serial port to half a million baud.

Origo 56k



Supplier: **Gasteiner (0181) 345 6000**
Speed: **56k (K56Flex)**
Voice: **Yes**
FlashROM: **Unknown**
BABT approved: **Yes**
Extras: **None**
Price: **£76.37**

The Origo 56k modem looks almost exactly the same as its slower sibling, the same case design and the like, and like the 33.6k one it's a bit annoying. The upper service of the case is slightly curved which means that you won't be able to sit anything on top of it – a bit of a pain if you already have a nice stack of external devices for your Amiga.

Again, just like its partner, the Origo 56k modem is about as fast as you would expect. I was regularly getting 44-48k connections, but I'm sure that people living in telephone exchanges will be able to get the full 56k. Either way, your transfer rates are significantly improved over 28.8/33.6k modems, making an upgrade to this spec worthwhile if you already have a slower modem.

You can't say much more about this one, but at least it was a bit faster.

85%

Power 56k



Supplier: **Power Computing (01234) 851 500**
Speed: **56k (K56Flex)**
Voice: **Yes** FlashROM: **Yes**
BABT approved: **Yes**
Extras: **Net & Web 1**
Price: **£99.95**

AMIGA FORMAT GOLD

Exactly the same in outward appearance to the well-liked Enterprise modems that have appeared in these pages in days gone by, the only change to the look of this unit is the addition of the voice modem features of a mic and speaker socket on the side. This is the thinnest of the modems we were supplied with and also the only one that has a phone socket (so you can daisy chain your phone through the modem rather than getting a socket doubler) that is the right shape and size for a BT phone RJ-11 plug.

Likewise, the Power modem is the only one of the four without a power switch. The other slight problem with it is that because the case isn't made of the thickest plastic, the LEDs kind of overlap when lit, so you often can't tell which of the nine indicators is actually lit.

In performance, the Power modem worked well enough and the supplied iBrowse and Termite TCP demo (known as Net & Web) comes as a welcome addition if you don't already have these things. Like the other 56K modems here, the Power modem is also a K56Flex model and it worked well with Demon Internet, who give a month's trial with the modem, but check this out for yourself. It seems that Demon's 56k beta test line isn't always activated, so you sometimes end up with a standard 33.6k connection instead.

Flat and low, this modem at least looks the part.

90%

Active 56k V1456VQE

Supplier: **Active Technologies (01325) 460116**
Speed: **56k (K56Flex)** Voice: **Yes** FlashROM: **Yes** – go to http://www.dynalink.co.uk BABT approved: **Yes**
Extras: **Microphone and headset, STFax**
Price: **£99.95 (£109.95 with STFax)**

AMIGA FORMAT GOLD



This modem is the smallest of the bunch and has the odd 'feature' of a door on the back to hide the ports when the modem isn't plugged in, but when's that going to be the case?

It has the usual RJ-11 line and phone sockets with the speaker and mic connections at the side. It also sounds a lot "tinnier" when dialling than the other modems and it doesn't look quite as nice.

That being said, the Dynalink gives a better performance in operation than the others, even though it has been made with exactly the same Rockwell chipset as the other 56k modems. The headset and mic supplied with it are obviously not of the best quality, but it does give a good result when combined with *STFax* so you can utilise all the features of the modem straight out of the box.

Active also do deals combining the modem with NetConnect and a faster serial port, so it may well be worth buying the whole lot in one go if you can afford it.

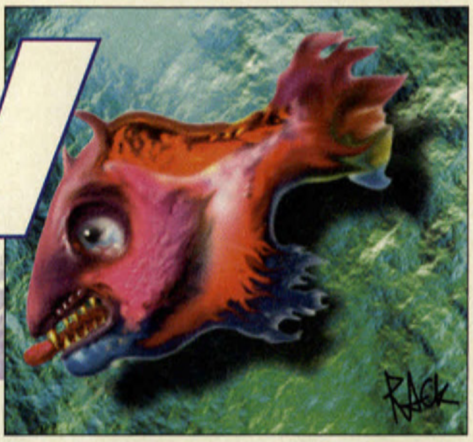
Quirky looking and not too handsome, but it performs well and comes with lots of extras.

92%

Dpaint V

Ben Vost takes another look at the one-time king of the paint packages.

AMIGA GOLD FORMAT



The extra CD that Epic supply has loads of very impressive pictures on it (right).



Painterly effects, thanks to *DPaint's* natural media functions.

Ahh, it seems like only yesterday we were all so excited by the prospect of a new version of the world's favourite paint package. When it came out there were a lot of cheers of approval – new media tools to give the impression of painting on canvas and the like, an ARexx port for better automation, 24-bit support (kind of) and more. But, the moaners groaned, it's very slow. It won't work on a graphics card so 24-bit support is a bit of a lie, and the ARexx port could be improved.

Unfortunately, this is all true, but that doesn't detract from the fact that *DPaint* is one of the finest palette-based paint packages of all time. Games companies that don't even develop for the Amiga often still have one tucked away somewhere in their development studio for the sole purpose of creating great looking sprites, which is almost unachievable with *Photoshop* and the like.

It's still the best choice when it comes to painting in HAM (or HAM8) on your Amiga. There are other programs available, but apart from *PPaint* (which doesn't handle HAM), there are none that are so easy to use.

DPaint is extremely easy to use. It has a manual that is second to none, filled with tutorials to get all sorts of effects for still pictures and animations. *DPaint's* Move command is still the best I've used on any platform. It's worth buying even just for these excellent features alone!

Having said that, it's not all sweetness and light. *DPaint V* isn't very fast at HAM, nor at standard palette-mapped modes because there has been a compromise made to encompass both styles of painting. Not only that, but *DPaint* really doesn't like working on a graphics card screen, which no doubt accounts, at least in part, for the rise to pre-eminence of *Personal Paint*, which is very happy to work on whatever graphics card you may happen to have.

This version, much like most of Guildhall's other re-releases, comes with a full manual and four floppies and is a bargain at only £19.99. However, if you have a CD-ROM drive then it might be an idea to get the CD-ROM version.

Unfortunately, this is a bit of a shambles. According to Epic, they are the only people to offer a full printed manual with the CD they sell, and a bonus CD that contains images, animations and fonts (amongst other stuff), all at the same price of about twenty quid. This is a must if you want the convenience of the CD version since it comes with an online excuse-for-a-manual. Really, all that's been done to put a manual on the CD is to scan in the whole thing, OCR it and put it on there as a single text file. Of course, the OCR isn't perfect either so you end up with passages like this:

```
"Hirlts and Remirlders while usirlg
DeluxePairlt V
  Manual Corlverltiorls
  Several special elements in the
  manual text are designed to make
  learning DeluxePaint V easier."
```

That won't be including the manual then. Another problem is that the Installer script on the CD is broken. It will get most of the way through the installation, leaving you with a working installation, but it won't finish it and you'll need to make your own assigns.

Other than the original four disks on the CD and the pitiful manual, there are no added fonts or data or anything that would lift this CD up from the dross. Whatever you think about the content of the CD, it does contain the whole of *DPaint V*, so regardless of the fact that you get nothing extra from it, it still contains one of the all-time great Amiga programs on it, and is easier to deal with than four floppies.

> *It has a manual that is second to none, filled with tutorials to get all sorts of effects for still pictures and animations.*

DISTRIBUTOR: Epic Marketing (amongst others) 0500 131486
PRICE: £19.99 floppy, £19.99 CD
REQUIREMENTS: Any 2Mb Amiga

SPEED: ●●●○○
Not the fastest paint package.

MANUAL: ●●●●●
Bloody marvellous. All manuals should be made this way.

ACCESSIBILITY: ●●●●●
If you've had an Amiga any length of time, you know what to expect.

FEATURES: ●●●●○
Only the lack of further development has held it back.

VALUE: ●●●●●
Can't be beaten.

OVERALL VERDICT:
Still an *AF* Gold, all the way.

90%



An Interview with... Polymorph

Jason Jordache introduces a true Amiga enthusiast.

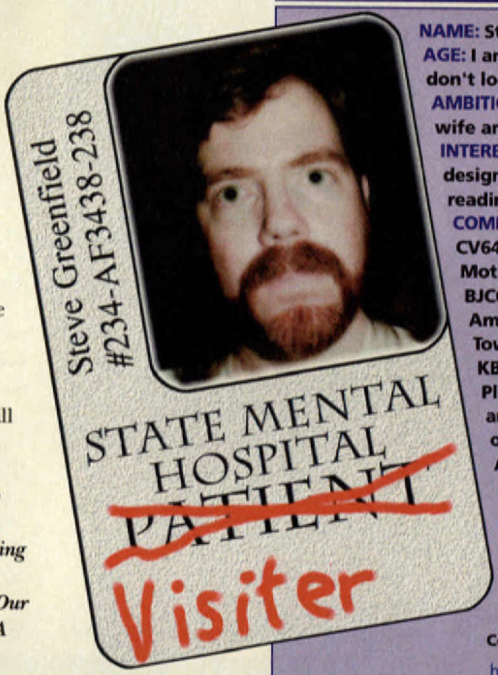
Steve Greenfield didn't think twice before splashing out on some of the best Amiga hardware and software around by which to power his company, Polymorph.

As he says, "Computer artwork has been something I've wanted to do for a long time. I guess I've known for a long time that the Amiga was the best, and until lately, only way to go."

Until last July, Steve worked as an electronics technician. If you've ever read the cartoon strip *Dilbert*, he says, "That could have been a chronicle of my last two jobs."

Since then his focus has been Polymorph. We asked him what it's all about and where he hopes to take it.

PROFILE



NAME: Steve James Greenfield
AGE: I am 35, although I don't feel over 30 and my wife Robyn says I don't look it, either.
AMBITION: Hmm... To start my own successful business, and for my wife and I to own our own house.
INTERESTS: Computers, fencing, wood and metal-working, designing electronics gadgets and sci-fi conventions. Mainly, I love reading and I'm fascinated by the universe and everything in it.
COMPUTER SETUP: A3000 CS Mk II '060/50MHz, 128Mb RAM, CV64/4Mb, about 9Gb HDs including Zip and Jaz drive, V-Lab Motion/Tocatta, Emplant Deluxe, 17" SVGA, 33.6K modem, Canon BJC610, PrimeraPro, HP 4c scanner, 4x CD-ROM, Ethernet, AmigaLink, MFC III, fans all over the place inside a MicroniK Tower with 300W supply. I also use a MSNatural keyboard via KB-10, Wacom 1212 cordless pen tablet, 1000VA OptiUPS. Plus my wife's 3000, which is getting slowly built up into another workstation, and a 1200 that I am installing into an old Osbourne luggable case, used as an "office machine". And all the other A500s and 1000s around here...
EMAIL: redbeard@nwlink.com and steve.greenfield@rook.wa.com
FAX: 206-274-0339
PHONE: 206-383-9140
COMPANY: Polymorph Digital Photography and Electronics
LOCATION: 2106 South 8th Street, Tacoma, WA 98405-3057

Contact steve on his new website at:

http://www.polyphoto.com

SG: *Well, the core concept is to digitally capture people and composite them into fantasy and sci-fi scenes. As we are starting pretty much on a shoestring, most of the scenes are generated by us at this time. Our debut will be at a convention here in WA state, USA, called Norwescon in March over Easter Weekend. We print out onto 8x10 glossies, coffee mugs, iron-ons, etc.*

This will all be done in real-time, compositing and printing while-u-wait. We have already done a preview at another con here, Rustycon, and generated quite a bit of excitement. I can also see a potential market in pet shows, although that's a bit less exotic.

JJ: When did you set up Polymorph?

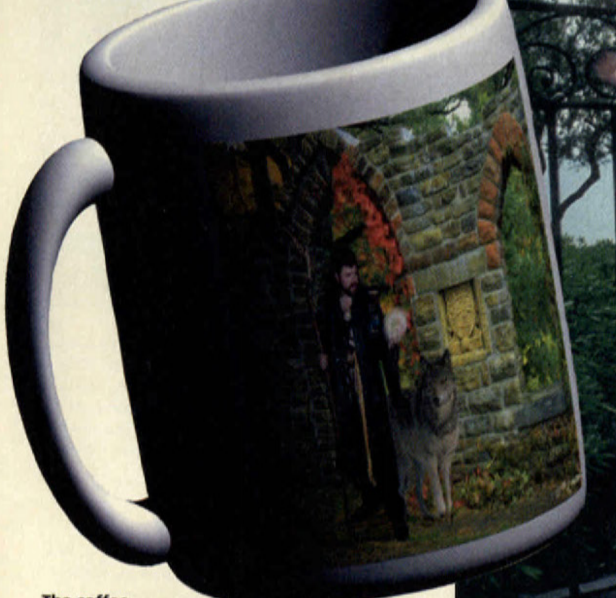
SG: *We really started setting up Polymorph Digital Photo in July 1996, but this is something I've wanted to do for a long time. I knew that I'd end up using Amigas as they have always been way ahead in terms of graphics and the OS.*

JJ: For compatibility's sake, many feel the need to move over to a different, non-Amiga platform. With your own business do you foresee any such compatibility problems arising in the future? Or are you confident the Amiga will stand as a sufficiently self-contained machine to let you continue using it?

SG: *As many other people have done, I can see the possibility of owning another computer for some certain tasks.*

Specifically if the PPC accelerators never materialise, maybe an Alpha-based WinNT system for Real3D *rendering. For the main task, photo compositing, it would be hard to beat* ImageFX *and the Amiga. And having used Windows in various versions, I have no love for it. Same for the Mac System 7.x.x.x.x...*

But if the PPCs ship and are



The coffee mug was done for the Graphics SIG as a tutorial on applying a graphic like a decal to an object. Again, it was done using *AF's Real3D 2.5* cover CD.



Continued overleaf ➡



supported, I see no pressing reason to own a non-Amiga system. However, if the Draco Alpha co-processor ever becomes a reality, and programs such as ImageFX and Real3D support it, then that would definitely be an option as I'd still be using the best OS in the world.

JJ: Describe a day in the life of making a typical picture.

SG: *We scan a photo with the HP 4c using the ImageFX driver, or take the picture with a Polaroid PDC 2000/40. There are no drivers for the Polaroid digital camera for the Amiga, so that makes things a bit more complicated.*

We use a Mac emulator to run the camera and it takes just under 22 seconds from "Snap Picture" until the Preview, and just under 26 seconds to save it to the HD. This compares well to the approximately 90 to 120 seconds it takes on a PowerMac.

The little girl on the chipmunk was actually on her father's back in their front yard. The butterfly wings were originally one wing shot straight from the side. I mapped it onto two rectangles in *Real3D*, adjusted their angles to fit in the picture and then just blended them in.



Time and Space was inspired by a frame and was a gift to the lady in the picture.



Polaroid tech support were stunned when I told them about this.

The picture is then manipulated and composited into a scene using a combination of ImageFX *and* Photogenics. *Background scenes are a combination of royalty-free pictures from CD-ROMS, personal photos and 3D rendered scenes and objects using* Real3D.

For instance, I just did a picture of a baby with butterfly wings on a cloud. I didn't have any wings that I liked at the right angle, so I mapped the wings that I did like onto rectangles in Real3D *and just moved the rectangles and the lighting until I got something which I liked.*

Lighting of the person is handled either by attempting to light them as close to the scene as possible, or to light them well all over and then shade them on the Amiga. Solid backdrops are used when possible. As the system goes "on the road", many times, we just have to work with what we get.

ID cards are printed on a Canon BJC 610 inkjet and laminated. 8x10 photo prints and transfers for coffee mugs are printed on a Fargo Primera Pro dye sub.

We also print out custom greeting cards using a combination of the colour inkjet and an Okidata 400e Laser Printer. The paper is a lot thicker than the Canon inkjet is rated for, but other than having to help it feed the paper initially, it works fine.

We use quite a few different graphics programs. I am of the opinion that I don't have just one kind of screwdriver, or just a hammer in my toolbox, so why limit myself to one graphics program?

JJ: What kinds of projects do you see yourself being drawn to, given the chance? Is your wife as enthusiastic as you about the Amiga in itself and as a creative tool?

SG: *I really love working on cool stuff, like*



Gopher Patrol was done with a scanned photo of the guy in the Garden Weasel costume. The position of the front gopher's hands was just begging for binoculars. There used to be another two gophers standing in the burrow behind where the Garden Weasel is now.



This is the skyline of downtown Tacoma, WA. It's severely compressed, not just by scaling but by cutting and pasting to push the buildings together. It was compressed this way by about 5 to 1, then the height was exaggerated by about 20%. The final size for print was 7200x3800 at 400dpi. The sky is from somewhere else, by the way.



costume gadgets for sci-fi cons, gadgets for everyday use, etc. We want to continue having an active part in the business no matter what, as it is just so much fun. We would like to do some more arty pictures. I tend to be the one arguing for a particular composition, whereas Robyn is more pragmatic about what the customer wants. I am also very interested in video.

> Can you imagine the impact on the PC world if you could compile AmigaOS to anything with a C compiler?

Although Robyn was already a happy Amiga user (A500, no HD, WB 1.3) when I met her, she was basically only using it for Wordperfect *and the occasional logic game. I have been driving her crazy by upgrading the software and hardware, but she has become quite enthusiastic about the business. Much of the actual compositing is being done by her and she is really having a lot of fun doing it.*

I tend to be the one adding little touches, like simulating depth of focus, blurring and adding soft shadows to enhance the realism to the nth degree. I feel our talents really complement each other.

I would love to have our own display in the art shows at some of the SF cons we attend. Even better if it sells! Not just for the money, although I wouldn't turn it down, as for the feeling of accomplishment.

JJ: Do you have a website?

SG: *No, no website yet. I am going to set up a personal one first, then a business website later. I am just learning to use* Real3D 2.5 *(I have v3.5 on order) as it is a very complex program, but I have a few decent looking practice pictures.*

JJ: And your hopes for the future?

SG: *My long range goal is to get large enough to have enough people working for me so I can pursue my pet projects, and for Robyn to work on a few of her own as well.*

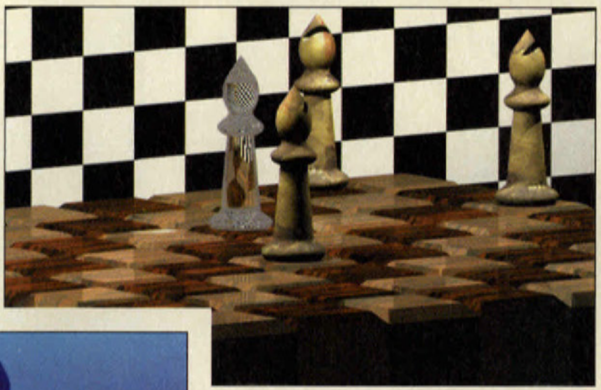
JJ: Where would you like the Amiga to go over the next few years?

SG: *I'd like to see the Amiga OS get ported over to Dec Alphas and PPC processors. The original OS was written in an early version of C, so I don't see why we couldn't have it like Linux where you have the source code on CD, with separate compilers for each platform.*

Can you imagine the impact on the PC world if you could compile AmigaOS to anything with a C compiler, especially the Intel processors? It may have to be 386DX or higher as it's a 32-bit OS, but that's not much of a limitation.

As for processor specific versions of software, if you write programs for WinNT you are faced with this problem, and it is not insurmountable. Even programs for the Amiga really come in different versions for different CPUs, and the only things that need to be compiled for different processors are the executables. Real3D 3.5 *is being distributed on CD with only data and demo versions on it, with floppies containing the main program executables for the specific version you are buying. So you can even buy the CD for a low price to try out the demos, then upgrade to the full version and they just send you the floppies.*

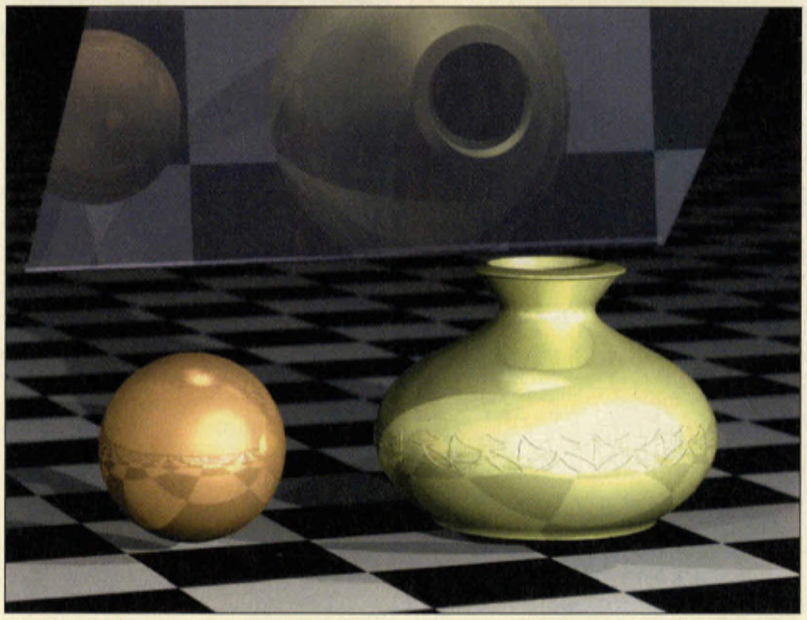
Chessboard and various bishops, generated in *Real3D 2.5* (the *Amiga Format* cover CD version).







An early composite picture done by my wife using V-lab motion single-frame capture to scan me in, and *ImageFX* to composite the separate elements. This is her first serious effort, done after only about 2 or 3 weeks of playing with *ImageFX* in her spare time.



Vase was the final picture in a tutorial I did on convincing reflective objects for the local Amiga club, Graphics SIG. It was done in *Real3D 2.5*. I do own *Real3D 3.5*, but those attending had the cover CD version *2.5* that *AF* so graciously supplied.

HiSoft C++

More development tools means more software, so could a new C++ compiler be anything but good news? **John Kennedy** finds out.

Any computer platform needs a supply of fresh software to stay alive, and until recently the Amiga was in the unfortunate position of lacking any serious development tools. The definitive package used to be SAS/Lattice C, but a few years ago it vanished into the murky world of the Internet and hasn't been seen in public since. No development tools means no software, a terrible prospect.

> *The one saving grace is the inclusion of the assembler package Devpac 3, complete with a (paper) manual.*

However, there is still hope. We looked at StormC, a package which shows great promise, not least because of its support for the PowerPC. Now HiSoft, those giants of serious Amiga development software, have released their own C++ compiler.

Although strictly a 680x0 family system, previous HiSoft triumphs have included the seminal Devpac assembler and Pascal compiler, so this new development tool has a lot to live up to. This HiSoft package is really the Maxon C++ compiler distributed in the UK. Maxon gave us Cinema4D, so they clearly know their stuff.

As you probably know, C++ is the language of the moment. Derived from C, C++ is powerful, fast and efficient. It can perform both low-level (bit-level) operations and high-level object oriented functions with ease. It's therefore ideal for writing everything from operating systems and games to dealing with large data processing and serious applications programs.

INTEGRATE!

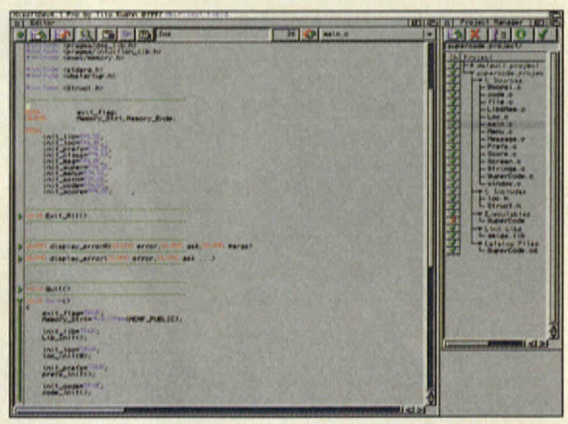
It's not enough to simply provide a compiler and linker these days as modern programmers demand an IDE, or Integrated Development Environment. This means they want to do everything from within the program, like enter code, compile, link, debug and manage all the files which a typical program requires. A good IDE will mean that the programmer never has to use the Shell again, as all of the options are set from windows and menus.

HiSoft's package certainly delivers this kind of programming experience. The integral text editor will highlight different keywords in different colours and the Project Manager window to the right keeps track of your files and makes compilation easy. All options can be set from windows, although, as with many Amiga programs, a good, large display mode and suitable monitor, and preferably a graphics card, make it easier to see everything in one go.

The coloured buttons in the requestors are fairly pretty and the layout is generally very easy on the eye and simple to use. For example, to open and edit a file, all you have to do is drag it from the Project Manager window into the Editor.

The compiler seems reasonably fast and reliable and is claimed to be ANSI C and AT&T 3 compliant, so it should compile all C++ programs. It's good to see that the OS 3.1 Include files are part of the package. It's ridiculous to think that some systems are shipped without these files as they are essential for writing any programs which make use of the Amiga's operating system. Without them, programs are limited to the Shell.

A quick test program seemed to indicate that code from the HiSoft compiler was smaller than the code from StormC, but that it ran about at the same speed. In other words, it was very fast indeed.



Code is edited by dragging the icon from the Project Manager on the right. Notice how different keywords are displayed in different colours.

DOCUMENTATION. NOT.

All is not perfect, however. I was amazed to open the package and discover that there was no printed documentation other than a brief installation guide and a tiny tutorial. For a program as complex as a C++ compiler, this is a bit of a joke. Instead we are pointed to the online help, which is installed to hard disk with the rest of the package. Yes, online help should be taken as essential these days, but it's no substitute for a good paper book. HiSoft's previous manuals have always been exemplary and it's a real disappointment not to see that tradition continued.

It gets worse, because the online help is quite awful. A badly organised guide to the compiler and tools and a description of C (not C++, but C) keywords is not going to encourage anyone to use this package. Beginners

LITE AND DEVELOPER VERSIONS

HiSoft's C++ comes in two flavours, a Lite and a Developer version. As you can see from the features chart below, the main difference is the inclusion of a Debugger and the Easy Objects Class Library. The Debugger is a useful tool, although you can do perfectly well without it if you don't mind spending most of your programming time looking for errors.

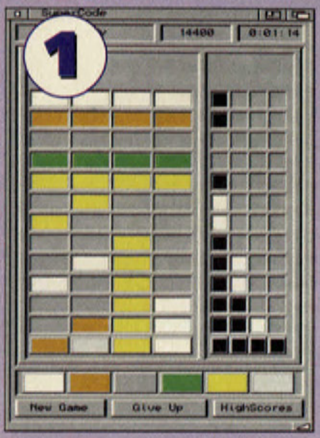
The Easy Objects Class Library apparently consists of Resource-handling, error handling with exceptions, data structures, and BOOPSI support. None of these features were covered in the supplied documentation.

	LITE	DEVELOPER
EDITOR	YES	YES
PROJECT MANAGER	YES	YES
COMPILER	YES	YES
SOURCE LEVEL DEBUGGER	NO	YES
HOTHELP READER	YES	YES
DEVPAC 3 ASSEMBLER	YES	YES
EASY OBJECTS CLASS LIBRARY	NO	YES

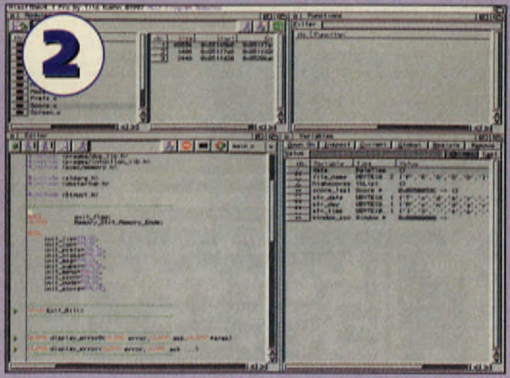
The Developer versions costs a whopping £169 and the Lite version is £79.

USING THE DEBUGGER

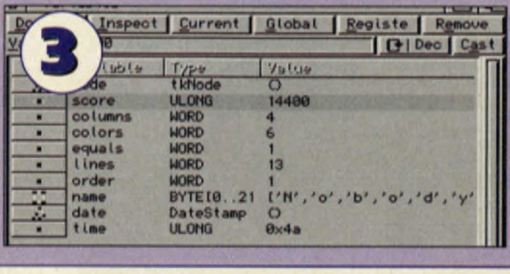
A source-level debugger is incredibly useful when writing programs as it means you can watch how your variables change as each line in your program is executed. Only the Developer version of HiSoft C++ comes with the debugger as standard.



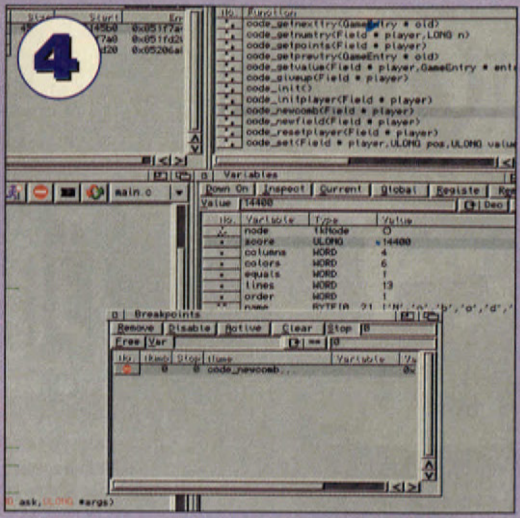
1. This is the sample application we are going to debug, a simple colour guessing game supplied as source code with the compiler.



2. The main debugging display takes up a lot of screen real estate. Notice a list of all the files in the top left window. When we drag a file into the variables window (bottom right) we get a list of all the variables used.



3. We can now go deeper still and see the contents of the variables. We can even change the values and then return to the running program to see what difference that might make.

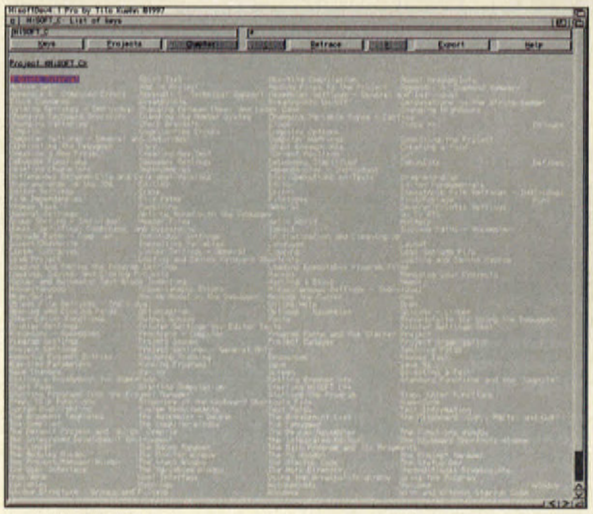


4. Breakpoints are another vital debugging feature as they allow you to pause the running program at a given point and then check the state of it. Here we've paused the program as a particular function is called.

will be totally unable to work out what's going on. Heck, the online help reader isn't even AmigaGuide, it's some messy proprietary system instead. There are still non-English error messages buried in the program too, which really sums up pretty well the amount of effort which has gone into this package.

There is no documentation on the Easy-Objects Class Library provided with the Developer version, and the supplied sample source code is all C based, making no reference at all to any of the C++ features.

The one saving grace is the inclusion of the assembler package Devpac 3, complete with a (paper) manual. HiSoft recommend that if you need to use assembler, you use Devpac rather than the compiler's built-in assembler. As Devpac is probably the best assembler available, I'm not going to argue. As with the C++ compiler, Devpac now supports the entire Motorola 680x0 family, up to and including the 68060 processor.



Yuck! This is all the documentation you get. And it's not even in AmigaGuide format.

NO CIGAR

Unlike the StormC system, there is no point-and-click designer available for creating windows, menus or requestors. I find it amazing that all Amiga development tools don't have this most basic of features as standard. In my opinion, this is a very big obstacle for new Amiga software. Compare it with Windows development tools and you'll see what things could be like. If you want to write an Amiga program which looks like an Amiga program, then you will still need to hand-code the necessary functions yourself. HiSoft C++ also lacks a profiler for searching for code bottlenecks.

The overall impression is that of a jumbled mess, and a disgrace given the fine Amiga software which HiSoft has given us throughout the years. The compiler and entire IDE look extremely good, but the documentation and lack of useful source code lets it down badly.

Yes, we Amiga users need some development tools, but we also need tools which we can use. Come on HiSoft, do the Amiga a favour and write a decent manual.

GAMES PROGRAMMING

If you're looking for a language in which to write games then you must consider C++. If you want out-and-out speed, perhaps for a super-smooth scrolling shoot-em-up, then you simply can't beat hand-coded assembler. However, if you want to build a more sophisticated program, you need C++. Many modern games programs are practically simulations, keeping track of a hundred enemy tank divisions and storing complicated three-dimensional graphics data, and these are applications at which C++ excels. By defining Classes of objects and packaging together all the data and associated functions, you can quickly create robust software that won't grow out of control.

Remember that C and C++ code can easily be linked with assembler. This means you can combine assembler graphics routines designed for speed with complicated routines and algorithms created in C++. It's therefore possible to have the best of both worlds.

DISTRIBUTOR: HiSoft 01525 718181
PRICE: £169 (Developer), £79 (Lite)
REQUIREMENTS: HD, 7Mb (Developer), 5Mb (Lite), 4Mb free memory, Wb2+

SPEED: ●●●●●
Fast compilation, fast code created.

MANUAL: ●○○○○
No paper manual, tricky online help.

ACCESSIBILITY: ●●●○○
Project Manager helps to keep track of projects of all sizes.

FEATURES: ●●●●○
ARexx support and code for 68060 processors. The debugger is useful.

VALUE: ●●●●○
The Developer version isn't bad.

OVERALL VERDICT:
Good looking and useful but lack of documents makes it difficult to use.

70%

OctaMED

Stephen Smith sees if this classic music package still hits the right notes.



OctaMED sprang from the *MED* (*Music EDitor*) program, which was written some years ago by Teijo Kinnunen.

This was a *SoundTracker* which basically meant that it gave you 4 tracks and you could place a number of samples in each of these tracks. The machine would then play through the tune you had written.

> It has a comprehensive sample editor which allows you to perform all sorts of weird and wonderful effects

OctaMED took this concept and updated it massively. Using some very clever hardware tricks, it enabled you to get up to 8 tracks of samples at once, giving you much greater flexibility in your music creating.

However, the program has now gone one step further following last year's release of the *SoundStudio* version. Thanks to a new hardware trick called "mixing", you can now have up to 64 tracks, 8 times as many as before. Of course, to use all these you will need a fairly beefy Amiga – an '020 is required and an '030 is even better. Naturally, *OctaMED* can be used as a standard 4 or 8-track program.

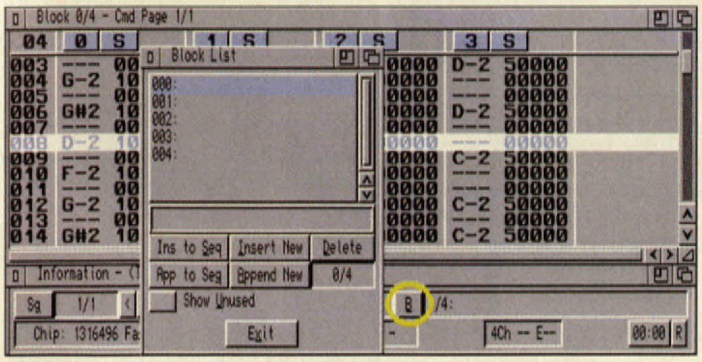


The program offers a huge array of options to help you to compose your masterpiece.

Because of the way it works, OctaMED is a great tool for both musicians and non-musicians alike. You don't have to worry about things like the correct note values being in the right place or getting the right key. This means that you can concentrate on what sounds good, which is the way music should be composed.

If you are a musician and you want to use the traditional score system then an editor is provided, although this is not *OctaMED*'s strong point. You'd be better off getting a copy of *Music-X* and using the provided *Notator-X* program, which is far more comprehensive.

Don't get the impression that you can only use *OctaMED* to create dance music. Although the program is ideal for that genre, and it is probably its forte, in fact, almost any style can be created, from a classical symphony to the latest head-banging fest.



The rather intimidating-looking *OctaMED* is actually extremely simple to use.

OctaMED has several other tricks up its sleeve. It has a comprehensive sample editor which allows you to perform all sorts of weird and wonderful effects, like changing the volume, adding an echo, reversing the sample, or creating a chord (several notes played at once). It also features player commands which alter individual notes or groups of notes as they are played, allowing you to perform pitch bends, fade-ins and outs with ease.

These are just some of the features. Despite its power, *OctaMED* is very easy to use with a Workbench 2-style interface, which won't take too long to get familiar with. The manual is only available in online version, which makes it a bit hard to work through tutorials. However, it is very comprehensive and will help you through almost any problems you might face.

YOUR REVIEWS

Have you got any software or hardware you couldn't live without? Got any that you'd happily chuck in the bin? Write a fair and accurate review of about 750 words and you could see your work appear in *AF*!

We will also need some good photographs of the hardware under review and a passport photo of you. Send your reviews to: *Amiga Format*, Long Term Review, 30 Monmouth Street, Bath, Somerset, BA1 2BW.

Problems? Well, not many really. Despite the ease of use of the program, the sight of it can be a little daunting for beginners. Also, the score that the score editor produces can be a little eccentric at times and you really have to fiddle about to get the best results from this. However, as I said earlier, if you really want traditional score output then I wouldn't use *OctaMED*.

The sample editor is perhaps a little under-powered too, a few effects could be added like a time-stretch facility, but again, there are dedicated tools that will do a better job. There are also a few specialist musical tricks that are hard to replicate in *OctaMED*, but these are just niggling points when compared to the sheer power of this package.

This is by far the best music program available on the Amiga. If you have a CD-ROM drive then it's even better, as this version of *OctaMED* comes with loads of mods and samples to load in and play about with.

Buy this, connect your Amiga up to your hi-fi (remembering to set it to "mono" mode, otherwise you'll get everything panned hard left and right, and you'll also get very annoyed) and blast it out – you never really liked your neighbours anyway, did you? Basically, an excellent program.

BEN'S VERDICT

The complete range of *OctaMED* versions have always proved popular with our readers, none more so than the current *SoundStudio* incarnation, and with good reason.

Many of today's most famous computer or dance-oriented musicians have at some point used a tracker – just look at our music feature in *AF103*. Best of all, you don't need to learn about the pentatonic scale or minor keys or even how to read music. Just get out there and compose!

OCTAMED SOUNDSTUDIO
DISTRIBUTOR: RBF Software (01703) 785680
Price: £29.99

OVERALL VERDICT:
An extremely powerful and easy to use music package which is ideal for beginners and pros alike.

95%

Eyetech's Spring Sale: EZ-Towers from £79.95!!!; 4-speed CDROM system - £89.95!!!; A1200 Magic Packs from £189.95; MP with hard drive, accel & 8MB - £329.95; EZ-Tower Systems inc A1200 from £349.95; 030 accel's w/4MB from £79.95, w/8MB from £89.95; 19 Mips '040/25 £128.95; 39 Mips '060/50MHz £268.95; 20% off mem prices bought with an accel.; LS120 £99.95; (Price down, New Product)

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HEALTH WARNING *"A buffered IDE interface is essential to avoid overloading of the A1200's IDE port when adding extra devices"- John Kennedy - AF - July 1997*

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8-Speed - £139.95
16-Speed - £159.95
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(*as an alternative to the regular CDPlus case)



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Includes 4-speed CDROM, metal case, 4-device buffered interface, power supply & CDROM power cable, 40-way and 44-way IDE cables and full instructions

Amiga User International - *97%* *"... It all worked faultlessly..."*
Amiga Format - *96%* *"... An absolutely superb bit of kit.."*
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Amiga 1200 Magic Packs



- Direct to Eyetech from Amiga International Inc.

- √ Full UK specification with Kickstart 3.1/Workbench 3.1 disks and manuals, UK psu, mouse, mousemat and TV lead and 2MB graphics memory (in addition to any memory expansion included in the packs below).
- √ Fantastic software bundle including Wordworth 4SE,Turbocalc 3.5, Datastore 1.1, Photogenics 1.2SE, Personal Paint 6.4, Organiser 1.1, Pinball Mania and Whizz
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New! Only available from Eyetech - *the* Amiga IDE/ATAPI peripheral specialists. Probably the only hard drive/CDROM/LS120/ZIP/SyQuest s/w you'll ever need.

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Just £199.95 (inc PC & Mac s/w)

A1200 *TowerDrives*

TowerDrives are only available from Eyetech



Important Note!

Thinking of buying a **BIG** drive? Dont waste your money on ***ANY DRIVE OVER 4.3GB*** as the Amiga O/S doesn't support it! (2^32-1 bytes actually). They appear to work but overwrite the RDB after 4.3GB into the drive. Be warned!

- √ All drives come ready-to-use with WB3.0 preinstalled & WB2.x install script.
- √ All drives come with over 45 top quality utilities (not shovelware) ***and*** MMe multimedia authoring software preinstalled, configured and ready-to-run.

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		1.2GB	£109.95
1.7GB	£139.95	2.11GB	£149.95
3.2GB	£179.95	4.3GB *(to the limit!)*	£229.95

D-I-Y and Bargain Corner

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2.5" 3x44-way hard drive cables for 2 x 2.5" drives (6cm+6cm)	£12.95
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Slimline external floppy/IDE SyQuest/IDE ZIP/IDE Jaz case	£6.95
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2 x 34pin ribbon cable + faceplate for A1200 int'l floppy in tower	£12.95
23p-M to 23p-F external floppy ext'n cable 0.5m £12.95; 2m	£14.95
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Phono plug x 2 to phono plug/socket x 2 audio mixer leads	£6.95
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Genuine CD32 PSU £12.95; Genuine A1200 PSU	£14.95
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23 pin m floppy drive connector to 4 pin HD/CDROM power plug	£9.95
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50MHz capable PGA FPU - £39.95; PLCC chip removing tool	£8.95
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Amiga CDROM disks - our selection - 5 for	£10.00
A1200/A600 internal floppy drives £24.95; A1200 keyboards	£24.95
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Four new Amiga Expansion Products from Eyetech

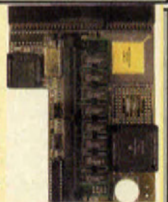
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Entry level A1200 Accelerators - Unbelievable value

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A Standard A1200 is rated at 1.3 Mips. All measurements from Sysinfo

Memory *: 4MB - £13.75; 8MB - £24.95; 16MB - £44.95; 32MB - £99.95*
Limited offer - 20% off these memory prices when purchased with an Apollo!

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Where your Amiga does more

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4-device A1200 buffered EIDE i/f	£39.95
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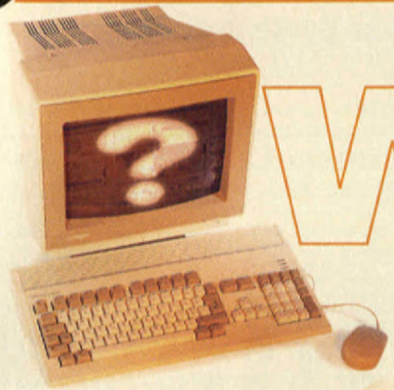
Next Day delivery to EC and USA/Canada. Worldwide deliveries in 2-7 days from receipt of faxed order and payment details. (eg SX32 next day to NYC £25.30)

UK m'land next day insured del'y charges: S/w, cables, buffered i/f £3; 2.5" drives, accel's, £6; manuals £7; 3.5" drives, PSU, SX32 £8.50*; CD+, MTwr £10*; EZTW £15*. (*2day)

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UK bank/building society cheques, Visa*, Mastercard*, Switch, Delta, Connect, Postal/ Money orders accepted. * A 3% surcharge is applicable to all credit card orders.

Due to space limitations some of the specs given are indicitive only - please ring/write for further details. **Please check prices, specs and availability before ordering. If ordering by post please include a contact phone no.** Goods are not supplied on a trial basis. E&OE. All prices include VAT at 17.5%. VAT is not applicable to non-EC orders



Workbench

When everything seems to be going wrong, there's only one man to call – *AF*'s Graeme Sandiford. Send your questions to: **Workbench • Amiga Format • 30 Monmouth Street • Bath • Somerset BA1 2BW.**

TOWER TROUBLE

I have an A1200 with 4Mb fast RAM and 33MHz FPU, a 3.5" 300Mb hard drive and a 12x CD-ROM drive via a Squirrel.

I have installed my system in a MicroniK tower system using a Windows 95 keyboard but my Amiga has become inoperable. When I switch on, my hard drive kicks in and my floppy drive makes its initial click, then the Workbench prompt appears. After performing a reset to load Workbench from my hard drive it doesn't load and I end up back at the Workbench prompt – if I'm lucky, as quite often the monitor display flashes red and blue and a recoverable alert message appears. The screen stays a dark grey colour.

Attempting to load from floppy is useless, because the program hangs when it loads. I have tried the boot options but the mouse pointer will not move, although I can select between PAL and NTSC.

I have read that tower cases are prone to shorting out, so could this be the problem? Or could my motherboard have been damaged by static electricity as I didn't use an anti static wrist strap?

Michael Kethridge
Isle of Wight

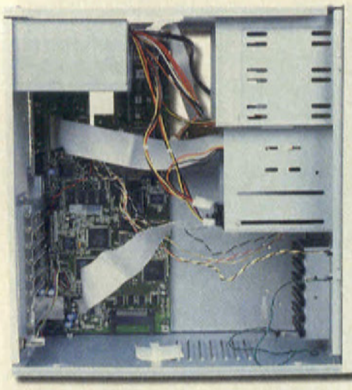
Bad things are happening. You must eliminate all the possibilities to track down what is misbehaving. First of all, remove the hard drive cable from the IDE interface on the A1200s motherboard. Try to use the Amiga with only the floppy drive to see if this works.

If it does, then the hard drive or the cabling is to blame, so check each carefully. It's possible that you have inserted a cable the wrong way round.

Now remove the Squirrel to see if this is the cause of your problems. If the system still doesn't work, check all the other cabling. Is the floppy cable wired up properly? What about the keyboard system? Try removing this and trying again.

Tower cases are only prone to shorting out if you are using a non-specific case and don't take care when mounting the Amiga motherboard. After all, the motherboard isn't designed to fit into the PC case. However, in a custom designed case like the MicroniK, this shouldn't be an issue.

As a last resort, rebuild your Amiga in its original case (or at least sitting on a table, out of the tower). It's possible that you have damaged the motherboard. When moving electronic equipment, you should always try to earth yourself (even touching a water tap or radiator every few seconds will do) and avoid touching anything other than the edges of the circuit boards. Don't poke chips with your fingers. I'd guess in this case that a cable somewhere isn't connected perfectly, so don't write off your Amiga just yet.



There are many advantages to housing your A1200 in a tower, but there can be problems too.

EMULATION QUESTIONS

Without wishing to appear ignorant, I would like to ask you a few questions about emulation.

1) I have been following your features on emulation and you often about talk about obtaining a ROM that was a chip that was inside the computer. Is this correct and if so how can I obtain a ROM image? Are there any other bits I may need for Mac emulation?

2) Will I be able to run *QuarkXpress* on a 6MB Amiga with an Apollo 1220 accelerator with FPU, and will I need to get much more speed and memory?



You'll need a fairly beefy machine to get the best out of modern Mac emulation.

3) How can I check if my FPU is working? SysInfo says it is, but some FPU specific programs don't seem to want to work with it.

4) I own an Epson Stylus 400-colour printer but when I print at 720 DPI it's so slow. If I get more memory and maybe a faster accelerator will this speed up the printing times?

Pete Smith
Middlesex

True ignorance would be to carry on without asking questions. Or something clever like that,

MISSING CD

I have an A1200 with 6Mb of RAM and a Blizzard 68030 accelerator board. I also have a Goldstar CD-ROM drive, a 40Mb IDE hard drive, 4 way IDE interface from Blittersoft and a full PC tower case.

The problem is when I try to use the CD-ROM and hard drive (I've only ever connected them separately). The CD-ROM works (turns on) when connected to the tower's PSU and the Amiga's IDE interface, but the Amiga doesn't recognise it, even when I use some ATAPI software from Epic.

The most I've ever got out of it was CDO: In the LOAD drawer.

The hard drive spins but nothing loads up when I'm in Workbench. Otherwise it spins and won't let me boot from floppy. When I put a disk in, no lights for the disk come on and the drive doesn't click.

Robin Savage
Newport

Connecting a CD-ROM and hard drive together requires a little effort. First of all, are you using them on the same IDE interface? If the Blittersoft device allows 4 devices to be used, then it works by offering a second IDE interface – as a single IDE interface can support two devices (the Master and the Slave).

If you connect one drive to each interface, then each will be a Master device, and you shouldn't need to experiment with any jumper settings. You will however need to refer to the Blittersoft documentation to see if the second IDE interface has a new device name.

You may need to inform the CD-ROM drive's file system software about this (probably in the Devs/Dos Drivers entry).

If you connect both drives to the same interface, then the drives will need to be configured using the jumper pins. You'll need to configure one as the Slave device and one as the Master. Depending on the drives themselves, the Master drive may need a setting such as "Master with Slave present". You should have documentation with the drives which explains this.

which someone famous may once have said.
1. *All computers contain a ROM. For example, the Sinclair Spectrum ROM contains this classic computer's entire operating system (if you could call it that) and BASIC programming language.*

The ROM is merely a memory chip which has data stored permanently inside it. An emulator program must have the same information to pretend to be that computer.

How the data is obtained varies. Usually a program is executed on the target machine which copies the ROM data to disk, which the emulator on the Amiga can then read – this is how it's done for the Apple Mac. In other words, you need to own a Mac to get access to the ROM information.

If you just copy it from any old Mac you are breaking the copyright. However, the ROM image is only one part of what is needed to emulate the Mac. You also need the operating system software.
2. *You need more speed and memory and preferably a graphics card to run the program in a sensible screen resolution. I'd really suggest you look at the Amiga's excellent Page Publisher applications instead.*
3. *If only some FPU programs seem to work, I would say that the card is working perfectly and that the software is to blame, or you are using the wrong version. Sysinfo will detect the presence of the FPU properly in every case.*
4. *Yes, a faster processor really will make a big difference, as will using a good printer driver utility.*

LOOSEN UP!

I am writing in reply to Roy Krister Ellingsen's letter in *AF 103* about his 1200 hard drive not validating and on occasions taking forever to run up.

I suffered a very similar problem when I fitted my hard drive. The problem was that I screwed the case back together too tightly. Once I had loosened the screws, the pressure on the drive was released and it spun at the correct speed. I hope this may be of help to anyone who writes in with a similar problem in the future.

Graham Beech
Signal Regt

That's one possible solution to the problem. Thanks Graham!

FASTER, FASTER!

I want to buy a tower for my Amiga 1200 and I have seen a full case tower which is £49.00 and a 100-speed CD-ROM drive which is £99.00.

I was wondering if you could answer a few questions regarding the above.

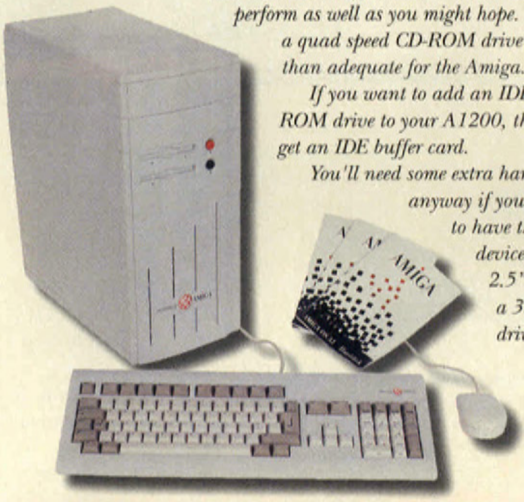
1. What advantages are there if I put my A1200 motherboard in the tower?
2. If I don't put the motherboard in the tower then how do I connect the tower to my A1200?
3. Will my 2.5" 120Mb hard drive fit in the tower?
4. I also want to buy a 3.5", 3.2Gb hard drive to go with my 100-speed CD-ROM. Will I need an IDE buffered interface?

Alexi Tzitzas
Cheshire

1. *If you put your A1200 motherboard in a tower case, it makes it easier, depending on the case, to add the extra electronics and circuit board which are required to support Zorro expansion slots. If you simply stick it in any old PC-style case this probably won't be true. Some people think it's more cool to have an Amiga in a tower case.*
2. *If you don't put the motherboard in the tower case you are effectively using it to house hard and CD-ROM drives. You therefore need a cable from the A1200 to the case, either SCSI or IDE depending on your choice of drives. Sometimes the power supply in the tower case is used to power the Amiga as well and so another cable is required.*
3. *Yes, you can get mounting hardware to place it inside a standard drive bay. Why bother though? It fits perfectly well inside your A1200. There is little point in moving it just for the sake of it.*
4. *A 100-speed CD-ROM? I think you'll find that a little liberty has been taken with the description of the speed. The only 100 speed CD-ROM drive I've seen uses a special cache program to try to speed up the CD-ROM, effectively storing the data on a hard drive. It was only for the PC and it did not perform as well as you might hope. I think a quad speed CD-ROM drive is more than adequate for the Amiga.*

If you want to add an IDE CD-ROM drive to your A1200, then yes, get an IDE buffer card.

You'll need some extra hardware anyway if you intend to have three devices (a 2.5" drive, a 3.5" drive and a CD-ROM drive) from the IDE interface, as it only supports two by default.


Make sure you check out the pros and cons of tower conversions.

CD TRACKS

I have an Amiga A1200 with a 1.2Gb hard disk and an 8Mb upgrade, and an A500. After reading an article in one of your mags about someone who connected an A1200 to an A500 to make music with *Protracker* I thought that I could do the same, but I have no idea how you do it. I would appreciate it if you would tell me how.

Can you also tell me what hardware I will need, and what it does? Also, what software will I need and where will I be able to get a copy from?

I want to get a CD-ROM for my A1200 and was wondering if I could take a CDTV's CD-ROM and connect it to my A1200, or if I could connect the CDTV to the A1200 so that the A1200 has full control over the CD-ROM? Would it be worth it to take the CD-ROM out of the CDTV anyway?

Duncan Rix
Saffron Walden

Any music tracking program which supports MIDI or external synchronisation should be able to link up with a similar system. In fact, with a program such as OctaMED *you only need a NULL MODEM cable, and not even a MIDI interface on each Amiga. You can then set up one system to be a master device, the other as a slave – when you start a tune playing on the master, the slave will start too.*

It's worth pointing out that this technique is only useful when you want to double the number of voices used in a particular composition. Even then, you'll need some kind of audio mixer to combine the audio signals from the two systems into one stereo pair for amplification or recording.

As for the CD question: No, removing the (very slow) CD-ROM drive from a CDTV and trying to use it with a A1200 is a dead end. If you want to take this route, rather than buying a dedicated CD-ROM drive for the A1200, then get hold of a program called Parnet. *This allows the A1200 and CDTV*

Continued overleaf ➡

NO LIFE IN NUMBER FIVE

I have recently purchased a CD-ROM drive for my Amiga 1200. Can you explain why it can read all of *Amiga Format's* CD-ROMs except for number five? None of its drawers can be opened. And could you please tell me how to add an icon to a program without one?

Ronald Keislair
Cheshire



The notorious number five CD-ROM was stored using a file system which not all Amigas can read. The solution is to install an upgraded CD-ROM Filing System or to contact the back issues department for a copy of the re-mastered version of the CD.

Any program which has an icon has an associated file ending in .info. This file contains the graphical image for the program's icon, but also extra information on the type of program and any settings which the program requires.

There is more to simply adding an .info file. For example, if the program with no icon is an AmigaDOS script, you need to invoke a utility called IconX. The easiest way to add an icon is to find a similar program of the same type and steal the icon. Just copy the .info file from the Shell and then load it into the Icon Editor to change the graphic to something more suitable.

Number Five, erm, isn't alive but here's how to get it working.

to be connected via a special lead. It also gives the A1200 access to all the CDTV's devices, including its CD-ROM drive.

STOP GO STOP

I run an Amiga 1200 with a 340Mb internal 2.5" hard drive, Squirrel SCSI interface and 2x CD-ROM. I have fitted a Blizzard 1230 IV accelerator with FPU and 8Mb of additional memory and I use a Commodore 1084ST monitor.

I find that the incessant whirring of the hard drive is very distracting, and that perhaps the wear and tear on the mechanical side of things is accelerated. I have found two small utilities on AMINET, both of which switch off the hard drive after a certain time, to be revitalised on the first call to the drive.

Are utilities of this kind safe to use, or can they be detrimental to other parts of my system? I would appreciate your views and comments.

Keep up the good work on an all round excellent publication.

Sam Quigg
N. Ireland

Yes, the whirr of the hard drive can be irritating, but that's modern computers for you. Perhaps things were better in the old days when the monitor and keyboard were in a different room...

I did read about a device which generated "anti-noise" to cancel out loud repetitive sounds, but in the real world there isn't much you can do about it. You could try turning up your stereo or wearing headphones.



Whirr – modern drives are much quieter than older hard drives.

It is possible to spin down a hard drive, but I wouldn't recommend it. Most hard drives are designed to run constantly, and they suffer most wear and tear when they are being powered up or powered down.

Performing this operation many times a day will shorten their life. With operating systems like Windows including "suspend" features, it's possible that hard drives are happier constantly starting and stopping, but I'd still rather turn up the music and not shorten the life of an expensive hard drive.

MORE MEMORY!

I have an Amiga A1200 and was wondering if you can tell me if there's any way that I can increase my on board chip memory. When I boot up my Amiga I am only left with about 837.824 chip mem and 6.740.944 fast mem and this is causing my machine to crash quite a lot as programs start to eat up what I am left with. I know that my problem is caused by using Magic Workbench and the use of background pictures for the Workbench and window screens, but if I don't use them then the plain screens get to be a bore.

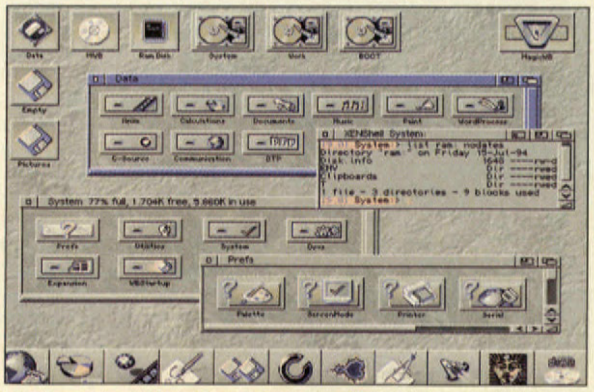
Any advice would be appreciated. Is there any way that I could use fast RAM for graphics in the same way as it is used for Workbench?

Mike Skinner
Aberdeen

I'm afraid you are stuck with the same 2Mb of chip RAM (also known as Graphics memory) as the rest of us. No Amiga can address more than 2Mb of chip RAM as this is built into the custom chips. The only thing you can do is minimise its use by cutting down on the number of colours used for your Workbench, and cutting back on the background images. Try using dithering for your background images as this can give the impression of more colours without the extra bitplane requirements.

The only way to use fast RAM for screen memory is if you upgrade your Amiga to a tower and fit a graphics card, although that's a little bit drastic.

It looks very nice, but it really eats up chip RAM.



POWER UP ON THE CHEAP?

I've just bought a Cyberstorm III accelerator for my new A4000. Only, as it is fairly obvious to even the most untrained eye, it's not actually a fresh bit of hardware – it's a PowerPC/'060 board without the PPC and support electronics on it.

Surely this is massively significant. Anybody with the requisite surface-mount soldering skills (which I have) could simply stuff the bits into the PCB and switch on. OK, so buying a 604e processor as an electronic component isn't going to be particularly cheap, but you can't tell me that there wouldn't be some sort of saving.

Current PPC boards may be good value, but they're still a lot of money, if you see what I mean. I think you should go some way towards making PPC Amigas more common by publishing the component layouts to make a PowerUP from a Cyberstorm III.

The only reason I ask is that phase

Workbench

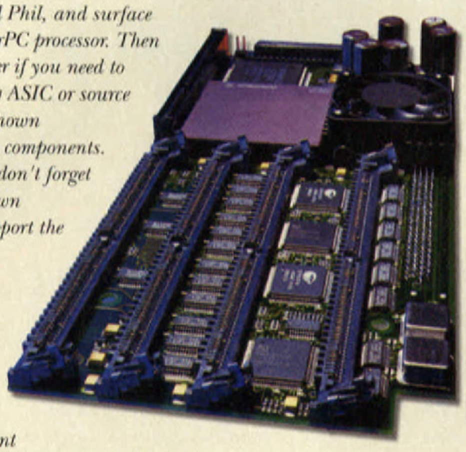
10 things to do when:

Your Amiga crashes all the time.

1. Check for virus programs using a good virus detector (see the *Amiga Format* cover CD). Don't use pirated software and switch your Amiga off for a minute between loading different games.
2. Make sure the power supply lead is connected properly to the back of the Amiga. Sometimes it can sit in place, but not fully home. Slight vibrations can then make a loose connection and cause crashing.
3. Test for mains surges and get a gang with a power filtering circuit built-in. Watch to see if crashes coincide with your central heating, fridge or washing machine switching themselves on or off.
4. Double-check that any memory or other expansion cards are inserted properly. Trapdoor cards are often not pushed into place as snugly as they should be.
5. Clean all contacts with a good quality contact cleaner: remove expansion cards, clean them and re-install them.
6. Keep your Amiga cool as an overheating processor can crash. Don't set your Amiga on a carpeted floor and use any cooling fan which came with an accelerator card.
7. If your Amiga is heavily expanded with memory and hard drives, make sure you aren't over-stretching the power supply. Buy a replacement PSU if necessary.
8. Test your hard drive for bad sectors. This is especially true if it seems to be being accessed all the time, even when nothing is happening. Use a program such as *Quarterback Suite* or *Amiback Tools* to test it.
9. Watch out for static electricity. If you get shocks, perhaps after walking over a nylon carpet, be careful not to touch any part of your Amiga without grounding yourself first.
10. Bring it to a repair shop! Sometimes you have to give up when the Amiga hardware is broken and needs to be professionally repaired.

5 are more likely to give you the data than they are me. It's worth a shot, and even if you can't do it, I still think you should stick something in your "News" column to that effect, just to calm the techies like me who are convinced it must be possible.

Phil Rhodes
Essex



The PowerPC board – you could try to make your own, but we don't recommend it.

Go right ahead Phil, and surface mount a PowerPC processor. Then you can wonder if you need to program a new ASIC or source any other unknown supplementary components. Oh yeah, and don't forget to write your own software to support the new processor.

It's not unknown for manufacturers to save costs by using the same basic card for different purposes. Simply because there is a gap on the card marked "604e" doesn't mean you can simply plonk in the chip and go. Even if it did, there could be other links or jumpers on your card to disable features. How are you going to discover them? What's in it for phase 5 to give out information like that? Don't they have development costs to recoup?

Your method of trying to get something on the cheap won't really help phase 5 or the Amiga community very much.

FONT OF KNOWLEDGE

Not a month goes by without someone going on about problems connecting the Amiga to a VGA monitor, and in the Christmas issue you state the Amiga isn't pumping out the exact frequency.

The Amiga's video hardware is programmable so a standard 31.4KHz VGA monitor is no problem. You must have the old Multiscan driver if you can only get 640 horizontal pixels. Since 1993, VET 40.x has given 656 pixels.

I enclose a disc with Multiscan with the tool types set so you don't need VGAOnly (included on our coverdisk). I have put a readme on the disc explaining a couple of problems.

Also, I have *XCAD 3D* which has been totally useless for what I require from it. Apart from only being able to use a graphic tablet in 2D mode, with lines that don't snap to the grid, it is unable to create even a model of a plywood dinghy. This is because you can't create a simple curved surface without resorting to mind numbing calculations outside the program.

Are any of the 3D modelling programs capable of being used as a CAD program, having surfaces which have measurements, or do you know of any programs that run under LINUX or NETBSD and XWindows? My A1200 has an '060 and 32Mb of RAM.

My other problem occurs when using CDs with large drawers, usually fonts. Selecting show all by name, I get a free some memory error message, so how can I get around this problem as it prevents me from copying files?

Also, in the Wordworth fonts drawer I have about 200 fonts. How can I create extra drawers which the program can access as I want to install a lot more fonts?

John Hancock
Bournemouth

The Amiga's video hardware may be programmable, but only within finite limits. No matter how much you tweak the settings, you are unlikely to find a setting which will work happily with all VGA monitors, and it would be wrong to suggest that all you need are some magic values to make everything perfect. Some monitors will simply not cope with the Amiga video and will roll vertically, or display such thick black borders that they will be unusable.

It should also be pointed out that messing around with monitor drivers can cause permanent damage to the monitor if you exceed certain values or refresh rates. Directly tampering with the drivers using a hex editor is not something that a beginner should think about attempting. The only reliable way to make the Amiga drive a VGA monitor is to get a graphics card such as a Picasso or CyberVision.

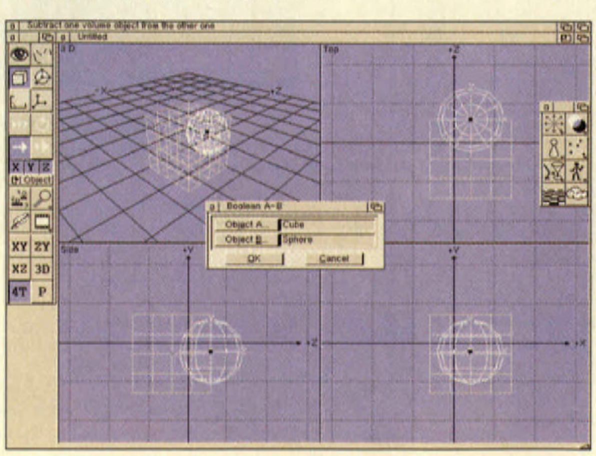
As for your CAD problem, have you considered trying a 3D rendering program? Several allow objects to be defined in sensible units and you can view your model from all sides in 2D if you wish. I'd suggest you take a look at HiSoft's excellent Cinema4D.

With regard to your fonts problem, try splitting the vast number of fonts between different directories. Create the drawers you want to store your fonts in – let's call them Font1, Font2 and so on for the sake of this example. Assuming these directories are in the root of hd0:, you would then add them to the system with AmigaDOS command lines such as these:

```
assign fonts: hd0:Font1 add
assign fonts: hd0:Font2 add
```

Remember that this is a temporary setting and you should add it to your user-startup so that it works every time you boot up your Amiga.

Perhaps a 3D package would be better than a CAD package for some designing needs.



IF YOU HAVE A QUERY...

At *Amiga Format* we aim to answer as many questions as possible. Unlike some magazines, we don't just concentrate on our areas of expertise – we take on all your problems (as long as an Amiga is involved).



Graeme Sandiford

Here are a few tips on sending in questions:

- **Be concise.**
- **Detail the problem as best as you can.**
- **Describe the events that caused the problem.**
- **Give full details of your equipment.**
- **Make sure your question is relevant and wouldn't be more easily solved by contacting the dealer from whom you bought the goods.**

Bear these points in mind and fill in, photocopy, or copy the form below as best you can. Unfortunately we cannot reply personally.

Send your letters to Workbench, *Amiga Format*, 30 Monmouth Street, Bath, Avon BA1 2BW.

Your Amiga:

○ A500 ○ A500 Plus ○ A600
○ A1000 ○ A1200 ○ A1500
○ A2000 ○ A3000 ○ A4000

Kickstart version

○ 1.2 ○ 1.3 ○ 2.x ○ 3.x

Hard Disk: .... **Mb**

Manufacturer: ....

Extra RAM fitted – type, size, (Mb) and manufacturer:

....

....

Details of other hardware:

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Amiga.net

ON THIS MONTH'S CD

AFCD24:-In_the_Mag-/Amiga.net

SITES OF INTEREST

Guardian Online – http://online.guardian.co.uk/
Haage & Partner – http://ourworld.compuserve.com/homepages/Haage_Partner/
NetConnect – http://www.amigaworld.com/netconnect/
Netscape – http://www.netscape.com/

Dave Cusick looks back on a turbulent year on the Web, and wonders what 1998 has in prospect for surfers everywhere.

Magazine deadlines are wonderful things. My hangover from New Year's Eve has barely cleared and I'm sat writing an article you won't get to read until well into 1998. You'll therefore forgive me, I hope, for taking stock of an interesting twelve months in the online world, particularly insofar as the World Wide Web is concerned. The online landscape is steadily changing...

Thanks to their enormous popularity, Webmail services (see Amiga.net in *AF107*) in particular have been attracting lots of attention from the Web big boys. In October, Web heavyweight Yahoo splashed out on one Webmail company, buying Four11 for just under $100m. But Four11 is only the second most popular Webmail service, trailing Hotmail by some distance in terms of members.



Haage & Partner's forthcoming Merapi could give the Amiga community a huge boost...

In just two years of existence, Hotmail has gathered over 9 million members, many of whom will view pages at the site on an extremely regular basis, making it an ideal place for Web advertising. Microsoft announced on January 2nd that they are to spend around $400m in buying Hotmail and incorporating its functionality into their Microsoft Network sites. The move comes at a time when MSN is switching away from the traditional subscriber-based content model, which so many companies have experimented unsuccessfully with, and towards a free content, advertisement-funded approach.

> "Acquiring Hotmail is just another in a long string of attempts by Microsoft to broaden their influence..."

Acquiring Hotmail is just another in a long string of attempts by Microsoft to broaden their influence beyond the world of desktop computers to encompass all forms of communications technology. Last August they bought WebTV, prompting the US Justice Department into quizzing Microsoft on its motives. Indeed, Microsoft is under fire from the Justice Department on several fronts, not least over the bundling of Internet Explorer 4 with Windows 95 on new PC systems. US Federal Judge Thomas Penfield Jackson recently ruled that Microsoft should "cease and desist" from forcing manufacturers to bundle the browser alongside the operating system, at least until a final hearing on the issue takes place on May 31st.

The ruling could have profound implications for Microsoft, because Windows 98 was set to incorporate browsing software completely into the operating system. Judge Jackson's ruling is of benefit not only to the likes of Netscape but also to Amiga users,



...particularly if it is capable of running powerful Java applications, such as Navigator/Maui.

AMIGA ICQ CAMPAIGN

Mounting pressure is being put upon Mirabilis, the producers of *ICQ*, to release an Amiga version of their software. *ICQ*, as reported in Amiga.net in *AF106*, has revolutionised online life for many PC and Macintosh netizens by allowing them to keep track of when their friends are on the Internet. Around 2,300 Amiga users have already joined the campaign. If you'd like to join too, take a look at http://www.mcmedia.com.au/amigaicq/.



NetConnect is possibly the most complete surfing solution available on any system, and the new version promises to be even more user-friendly and powerful than the original.

because by preventing Microsoft from increasing the number of Internet Explorer users, it could frustrate Bill Gates' efforts to shape HTML and the Web in general, in the same way he has shaped the world of home computers.

Incidentally, while we're on the subject of legal battles: those of you who used to read my ramblings in the now-departed Amiga Computing may remember that around eighteen months ago I wrote a piece on the squabble between two Shetland publications that threatened to spell the end of the Web as we know it. As you will no doubt have realised from the fact that the Web never quite fell to its metaphorical knees, linking directly from one site to pages within another site turned out not to be a violation of copyright, as the Court of Session in Edinburgh decided in early November. For those who are interested, there's a full report on the decision on the *Guardian* Web site.

Meanwhile, as increasingly large numbers of computer users get themselves online, e-commerce has continued to grow at a steady rate. Amiga users have for some time been in a good position to get in on e-commerce at this relatively early stage, with both Voyager NG and iBrowse supporting the SSL technology which makes secure credit card transactions possible.

So far, books, music and computer hardware and software are the main items Net users have been prepared to buy online, but according to Reuters, research by American company ActivMedia has suggested that the United States accounts for around 86% of e-commerce revenue while the whole of Europe accounts for just 5%.

The key to the continued long-term growth of e-commerce could well be the success of set-top boxes. In the US, WebTV have already shifted around a quarter of a million units. The machines proved so popular in the run up to Christmas that users apparently experienced speed problems caused by the sudden influx of new owners to the system. But, as all Amiga owners know, there are already some extremely affordable alternatives to Pentium PCs.

With Haage & Partner's Merapi apparently set for a spring release, the announcement over the festive period that Netscape will release a full Java version of their Navigator software is a particularly interesting one. Codenamed Maui, but already dubbed "Javagator" by the media, the software should be available by July, but beta versions could be posted on the Netscape site well before then. Mind you, Voyager and iBrowse aren't exactly lacking in features, coping easily with most of what the Web has to offer – with the only notable exception at the moment being JavaScript, which is promised for Voyager in the near future.

With Netscape Communicator and Microsoft Internet Explorer weighing in at a hefty 10 or more megabytes each in archived form, there's a growing belief in the PC community that the so-called "Battle of the Browsers" has resulted in behemoth browsers packed with features which most users will never need, to the extent that a compact new browser called Opera is proving to be quite popular too.

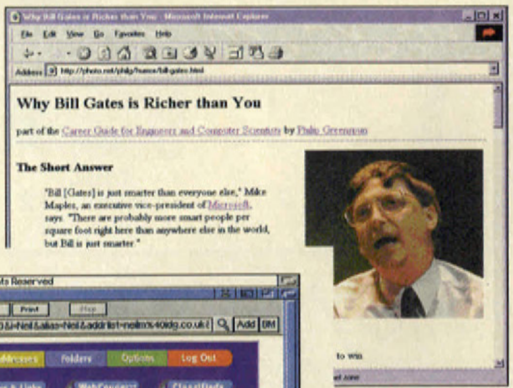
Voyager and iBrowse are almost as powerful as the big two PC/Macintosh browsers and, being created by a handful of dedicated computer users rather than a colossal programming team, will always be geared towards incorporating features which actually benefit their users, rather than impressing men in suits in Silicon Valley.

Indeed, many of the much-vaunted developments which were supposed to revolutionise the Web in 1997, and which might potentially have left the Amiga behind in terms of client software, failed to have much impact.

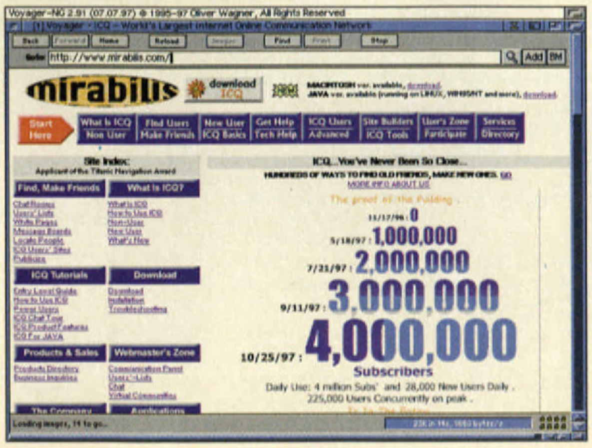
Most notably, "Push" technology from the likes of Pointcast and Marimba, which some writers claimed would spell the end of traditional, open-ended Web surfing sessions, proved a pointless innovation. In fact, so long as the likes of Olli Wagner and Stefan Burström can keep up with the ever-changing standard that is HTML, Amiga surfers have little to complain about.

As I write, the release of NetConnect v2 is just a few days away. The original NetConnect bundle made getting onto the Internet with an Amiga a breeze, containing complete versions of some of the best Net packages currently available for the machine.

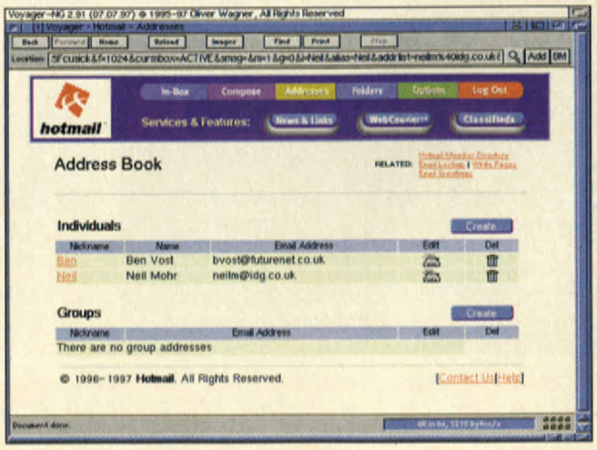
Let's hope that the availability of an updated version, coupled with a concerted push of Amiga technology by Gateway 2000 and licenced Amiga developers, can bring about a sizable increase in the Amiga online community during 1998.



This man scares me. Be afraid... be very afraid.



Persistent Amiga owners have already managed to get the likes of *Myst*, *Doom* and *Quake* converted to the system – let's see if we can get *ICQ* ported too.



Hotmail, which we looked at last issue, became so popular that Bill Gates bought the company.

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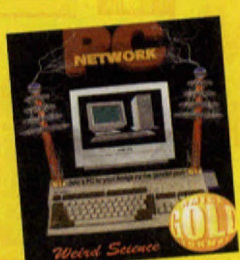
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Back Issues

Missed *AF*? Don't miss out completely, order it now while stocks last...



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This excellent text editor is just one of four invaluable utilities on this disk, with *Lzx*, *M21* and *Cli Master*.

AGE OF ROCK

Multi-player shoot-em-up puzzle action in the full version of this inverse *Tetris*-with-guns game!

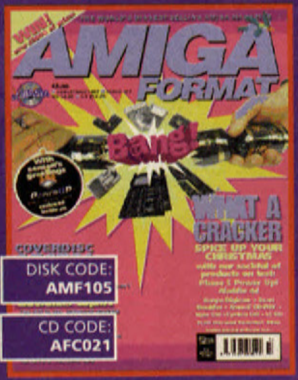
Our definitive guide to setting yourself up in a business based around your Amiga and all the best new hardware and software.

AFCD23

Hear Petro's speech at the Cologne show, 200 hard drive installers, two raytracing packages, loads of reader requests and ReaderStuff and far too much more to mention in this space!



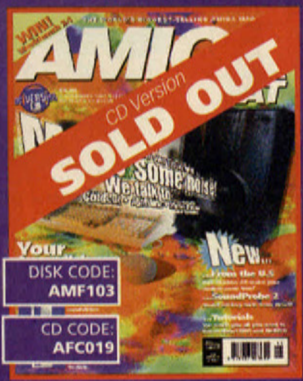
Coverdisks:
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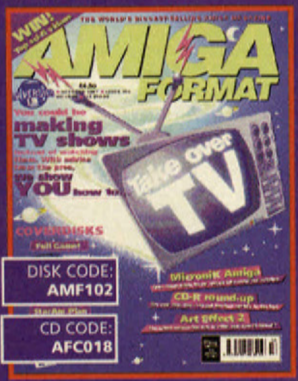
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AFP108

CREATIVE

The indispensable guide to getting the most out of your software



When we said that these creative pages were for you to find out things you really wanted to know, we meant it. I'm glad that a lot of you have been writing in suggesting tutorials that we might do. In fact, I wrote one myself this month. We are not necessarily tied to doing a lengthy series on things, so even if you just have a one-off question that we can cover in a month, please write in!

This month I've responded to a number of people who wanted to colourise black and white pictures in *PPaint*. Unfortunately, *PPaint* isn't ideally suited to this task, but I gave it a shot anyway and you can see the, er, interesting results on this page. I have no idea how it will look when it's printed, but it isn't too shabby on the screen.

It is unlikely that we will repeat tutorials we've done in the last nine months or so though, so you can stop writing in asking how to use *Blitz Basic* to write Internet software. No, really. Anyway, I look forward to hearing from you.

Nick Veitch

SEND IT IN!

WE NEED YOUR INPUT.

Is there something that you would like to see covered in one of the current tutorial series? Why not send your suggestion to us at the magazine. Here are some things you might like to think about:

AREXX

Commodore's excellent decision to include ARexx with Workbench was only matched by their stupidity in not documenting it properly. If you are having trouble why not write to us with a description of what you are trying to do.

PAINT PACKAGES

Unsure of how to get a particular effect? Do you think there must be an easier way? Our experts could help.

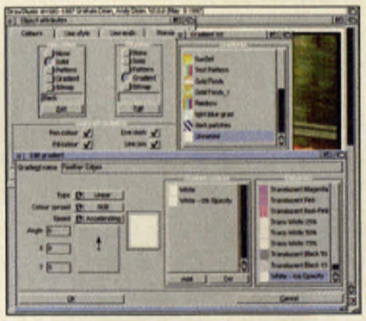
DRAWSTUDIO

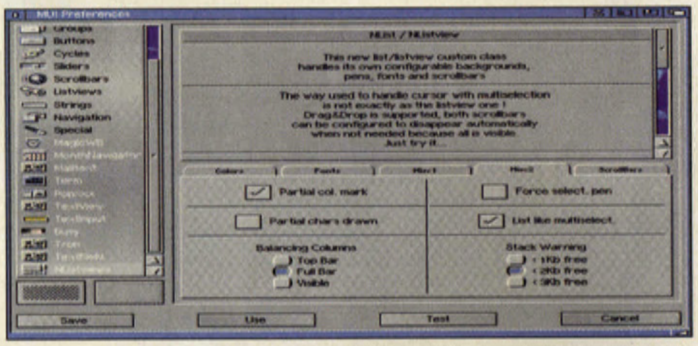
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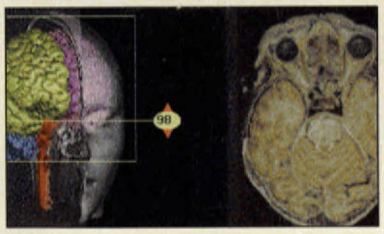


A transparent gradient applied to a bitmap.

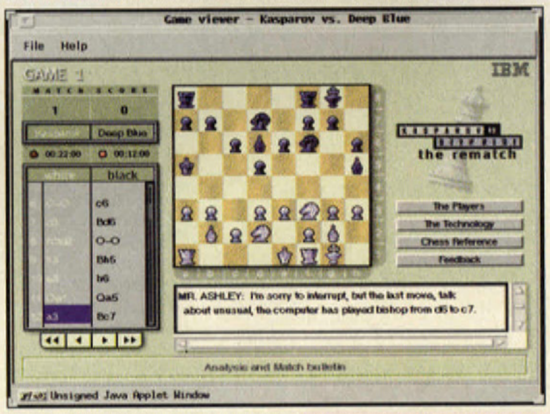




The MUI listview, which is restricted by the lack of a horizontal scroller.



Java, chess and cross-sections of a brain? Find out what it's all about in this month's guide.







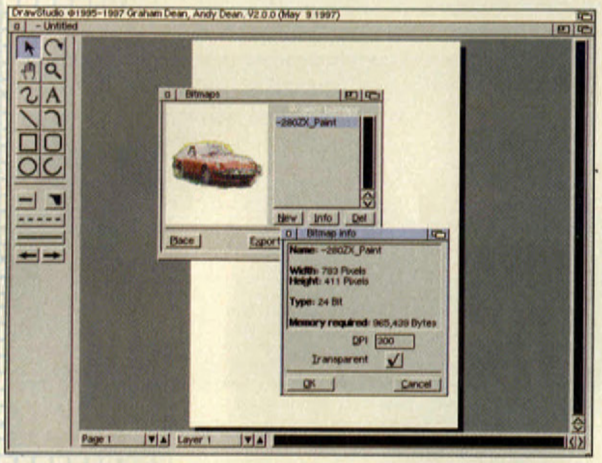
Turn sultry Mädchen into glorious colour in a few simple steps – we show you how.

DrawStudio

Larry Hickmott is back to tell you more about *DrawStudio*, with a few ideas on creating colours that we can all see through.

AFCD24:-In_the_Mag-/Drawstudio — ON THIS MONTH'S CD

If you're tired of those old-fashioned features in programs like *ProDraw* and *ProVector*, let me lift your spirits by telling you about transparency, a feature of *DrawStudio* that enables you to easily create different see-through colours.



Now that may sound pretty ordinary, but by the time you've worked your way through the following tutorials, I'm sure you'll be as hooked as I am on this outstanding feature. In short, transparency enables you to create soft shadows, realistic object shadows, lighting effects, gradients that you can see through and probably a lot more that I've not thought of.

Transparency is also supported in bitmaps but in a different way to colour fills. By clicking on the Transparent check box in the "Bitmap Info" or "Object Specs" requestor, you can make the white areas of a 24-bit image transparent.

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To understand transparency in DrawStudio, all you need to get to grips with is the "Edit Colour" requestor. It is in this requestor that you create and give names to transparent colours.

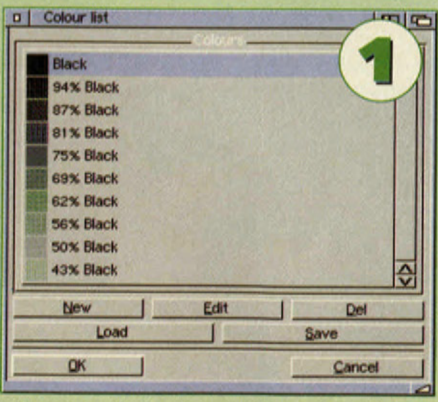
It's so simple to create a transparent colour that you'll get the hang of it in a few seconds, which leaves me plenty of time to show you what to use transparent colours for.

This requires a little more lateral thinking and that's where the following tutorials come in, based on some examples from a book which I've written on the program.



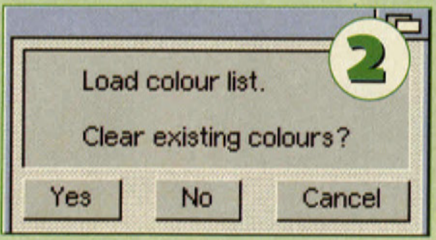
In order to view transparent objects, you must have either a 24-bit or 8-bit grey display mode selected. This does not mean you need to have a 24-bit graphics board.

CREATING A TRANSPARENT COLOUR LIST

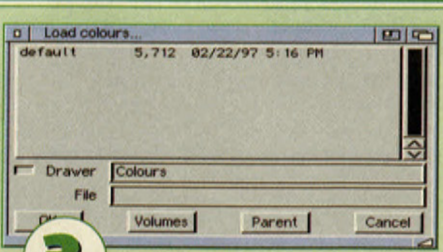


1. Choose Attributes from the Object menu. Then click on the Solid radio button and then on the Edit button in the same column. The "Colour List" requestor is displayed.

Although *DrawStudio* lets you delete colours from a list, a quicker way is to clear the list of all colours, enabling you to create a custom list which can then be saved to disk and loaded into DrawStudio when needed. Here's how you clear the list of existing colours.

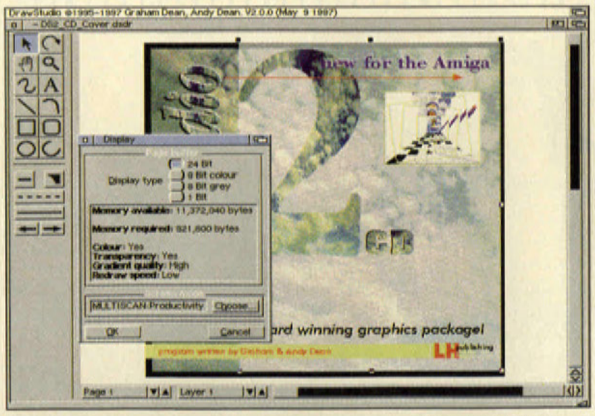


2. Click on the Load button in the "Colour List" requestor. A warning requestor will then appear asking if you want to clear the existing list. Click on the Yes button.





3. A Load requestor is displayed. Click on Cancel and the list will be cleared. You can now create a set of custom colours and then use the Save button in the "Colour List" requestor to save the colour list to disk.



When exporting images like this CD cover, choose either 24-bit or 8-bit grey so transparent objects are retained in the picture.

Before I leave you to tackle the tutorials, here are a few guidelines which are worth noting. The first is that transparent colours can be used over the top of each other. This means that instead of creating a 5% White and then a 10% white, it can be just as easy to clone the 5% one and then layer it to create varying degrees of transparency in 5% increments.

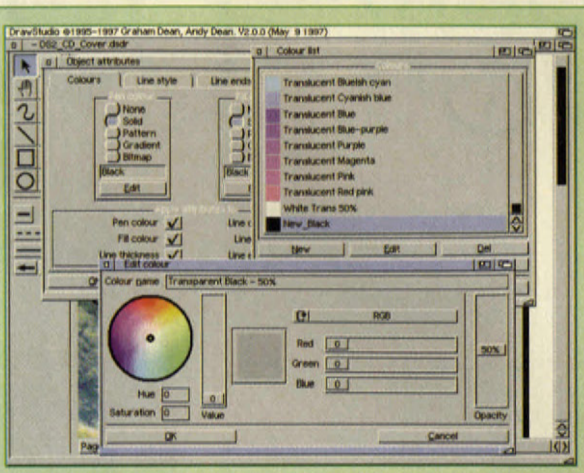
In order to use transparency in printed and exported pictures, the objects must be exported or printed in 24-bit. In other words, those of you using a Lite version of the program which does not have 24-bit export or print, transparency can be seen on-screen (with 24-bit display mode selected) but will be stripped if you export as 8-bit colour or print. However, transparency is supported if you use 8-bit greyscale export or print.

Because transparent colours are so useful, I recommend you create a colour list of them and save it to disk as outlined in one of the following tutorials. What is not supported in DrawStudio is transparency in bitmaps, except for the following. When using 24-bit bitmaps, colour 255, 255, 255 can be made transparent by selecting the Transparent check box in the "Object Specs" requestor or a similar check box in the "View Bitmaps/Info" requestor.

The second option for transparency in bitmaps is that colour 0 in palette based images (16, 64, 256 colour pictures for example) will be the one that is transparent.

> Because transparent colours are so useful, I recommend you create a colour list of them and save it to disk...

CREATING A TRANSPARENT COLOUR



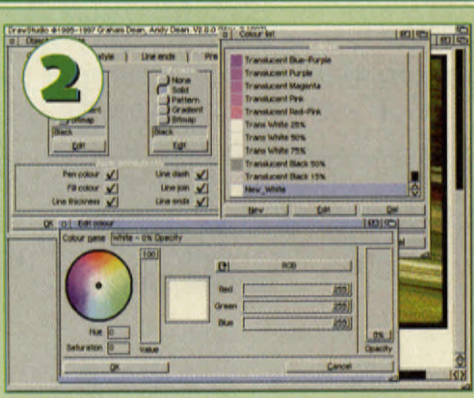
To create a 50% transparent black, start by going to the Attributes requestor, click on the Solid radio button and then on the Edit button. With the colour Black highlighted in the list, click on the New button in the "Colour List" requestor. Click on the Edit button and then finally, in the "Edit Colour" requestor, give the colour a name, change Opacity to 50% and click OK.

TRANSPARENT GRADIENTS

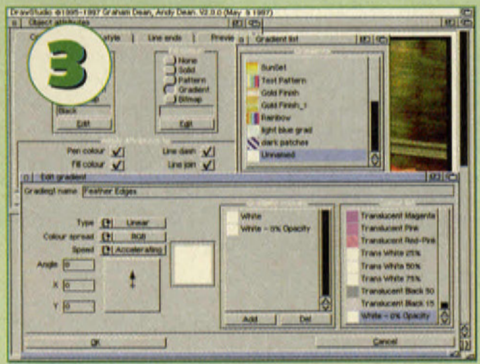
In this tutorial I will show you how to create a transparent gradient, and how to apply it to a bitmap to create a special effect.



Place a bitmap image onto your page in *DrawStudio*. Click away from the image so that no objects are currently selected.



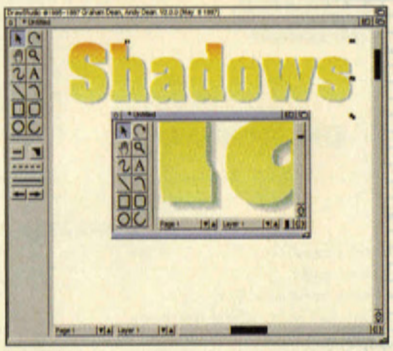
Choose Attributes from the Object menu. Click on the Solid radio button and then on Edit. In the "Colour List", click on White and then on New. Now click on Edit and, using the "Edit Colour" requestor, create a colour with 0% Opacity. Click OK and OK to return to the Attributes requestor.



On the Attributes requestor, click on the Gradient radio button and then on the Edit button. In the "Gradient List", click on New and then on Edit. Give the gradient a name and then find the colour White in the "Colour List". Click on the Add button and then repeat, but this time add the colour created in step two, the one with 0% opacity. Set Speed to Accelerating, Type to Linear and Colour Spread to RGB.



Click OK, and then OK again in the "Colour List" to return to the Attributes requestor. Make sure that None is selected from the Pen Colour column and click OK. The default colour fill is now the gradient created with no line weight. Using the rectangle tool, draw a rectangle over the bottom edge of the bitmap and then move it into position so you get an effect like this, where the edges fade into the page.



Drop Shadows – Transparent colours can be used to create drop shadows for text objects and so on. In the example here, I've used a 5% transparent black and applied it to a clone of the coloured text. I then zoomed in on that text object so I could only see one letter of the word, cloned the text again and used the cursor keys to offset the text, one pixel up and one pixel to the left. I then repeated this many times until I had the effect I wanted. I then grouped all the clones and placed the original text over the top. In order for this to work, you must change the Clone Offset in Prefs/Creation to 0 in X and Y.

Magic User Interface

In the final part of this series, Dr. Karl Bellve continues his explanation of MUI Custom Classes, examining them in more detail.

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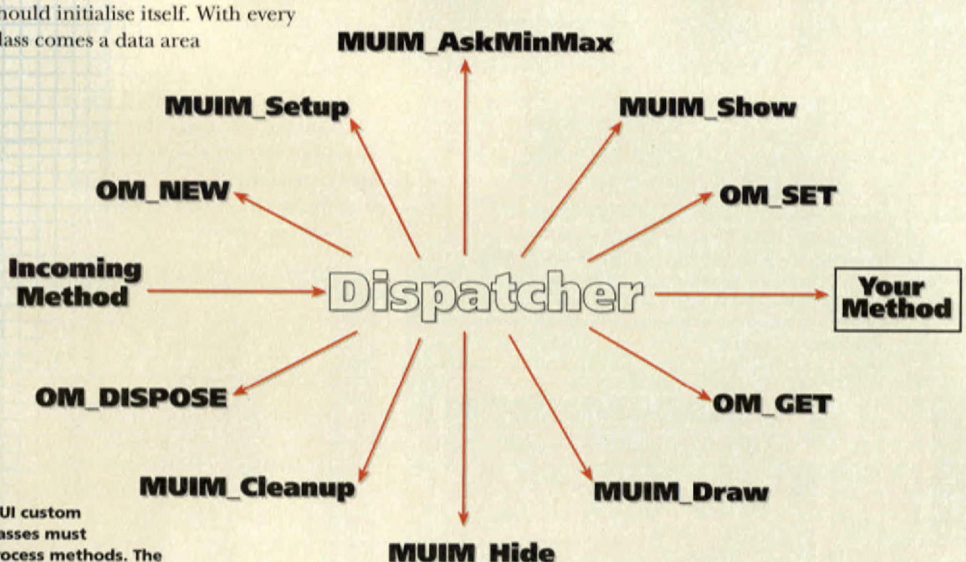
This month I will try to discuss the nuts and bolts of a MUI Custom Class. MUI Custom Classes are just a set of methods. They should always have the standard methods that MUI expects: OM_New, MUIM_Setup, MUIM_AskMinMax, MUIM_Draw, MUIM_Cleanup and OM_Dispose. Additionally, your class might have additional methods that you add to increase the functionality.

Every method must go through a dispatcher function, which acts like a traffic policeman at a crossroads. It looks for method IDs, which are really just numbers, and passes the method with the attached data to the appropriate function.

OM_NEW

The first method your class will see is OM_NEW. This lets your class know that it has just been created and it should initialise itself. With every class comes a data area that can store important information and this is initialised at this point. This data is called "struct INST_DATA *data;". This is a structure that you define to keep your data. To retrieve this data during a method, you would call the macro "data = INST_DATA(cl,obj)".

> *If a program is using your class several times, then each instance of your class would have a unique data area.*



MUI custom classes must process methods. The dispatcher takes these methods and directs them to the proper functions. If it doesn't understand the method, it should just pass it on. The figure shows the standard methods that you should institute, but you can also add your own.

Now you can use the pointer, *data, to access information that is associated with the instance of that class. If a program is using your class several times, then each instance of your class would have a unique data area. You can keep anything in your data area and you initialise values in it during OM_NEW. You may also allocate memory but you need to keep the pointer to the memory in your data area. You should later dispose of this memory in OM_DISPOSE.

If your class has a set of attributes, you might see them initialised in OM_NEW. Attributes are normally set in OM_SET. Instead of having code in OM_NEW that duplicates OM_SET, you can just pass on all methods to OM_SET. MCC_Tron does this. For example:

```
/*** trick to set arguments ***/
msg->MethodID = OM_SET;
DoMethodA(obj, (Msg)msg); msg-
>MethodID = OM_NEW;
```

This would be put at the end of your OM_NEW method. It just passes everything to your OM_SET function where it is processed, then it returns and then you can exit from your OM_NEW function. The one thing you don't do in OM_NEW is initialise any display dependent variables. This is done in MUIM_Setup.

MUIM_SETUP

This is where your object will learn about its display environment, but before the window that contains your object opens. The first thing you need to do is to pass MUIM_Setup to your superclass to allow it to be set up first:

```
if
(!(DoSuperMethodA(cl,obj,msg)))
return (FALSE);
```

If your superclass encounters problems then your object should just return FALSE and exit.

During MUIM_Setup, you can request that MUI sends you events like mouse movements, mouse button



MUI uses specific methods to communicate with your class. Many of these methods work in constructor/destructor pairs. For example, your class will always see MUIM_Show before it sees MUIM_Hide. MUIM_Draw will only be seen between these two methods. MUIM_Draw is the only place where your class is allowed to draw.

presses or keyboard events. To request mouse and keyboard events, you use:

```
MUI_RequestIDCMP( obj,
IDCMP_MOUSEBUTTONS|IDCMP_RAWKEY
);
```

Of course, you should reject these events when your object is disposed (MUIM_Cleanup). You also don't want to request time consuming events like MOUSEMOVES and INTUITICKS all the time. Instead, only request these events when you need them, like after a user presses a mouse button, then release them after the user releases the mouse button.

Other things that can be done in MUIM_Setup include getting the pens you may need to draw with and getting any screen information you may need.

MUIM_ASKMINMAX

MUI needs to know how big your object will be. You need to pass on the method to your object's superclass in case it needs to add to your object's size – if your object has frames, for example.

If you don't want your object to be resizable, then you would set MinWidth and MaxWidth to be equal. However, since MUI prides itself on being resizable, you should consider making your object flexible in its dimensions.

You may have noticed you add (+=) your dimensions to the tags passed to your object since your superclass may have added to your object's size.

MUIM_SHOW:

Once the window of your object is opened, your class receives this method. You may do window/rasport environment dependent things.

MUIM_DRAW:

This is the most important method in your class and this is the only time you are allowed to draw your object. First, pass on the method to your superclass to allow it to draw (DoSuperMethodA(cl, obj, (Msg)msg)).

Once your superclass has drawn, you will receive one of two flags. MADF_DRAWOBJECT indicates that you need to completely redraw your object, which is usually after a window has been resized or opened. MADF_DRAWUPDATE is sent when you need only to do a partial redraw.

MUI will never send this flag but you can use it to send it yourself. I usually keep information in my object's private data area that indicates what has to be redrawn when it sees MADF_DRAWUPDATE.

The example ImageMap.mcc last month stored the ID of a tile that needed to be redrawn. After the redrawing, I then reset the private data to get ready for the next update.

To make drawing easier, MUI has many macros listed in mui.h. The following macros should be used: _mleft(obj), _mright(obj), _mtop(obj), _mbottom(obj), _mwidth(obj), and _mheight(obj). These allow you to know all the dimensions of your object and what area you are allowed to draw in.

There are other macros, like _left(obj), that you can use, but they do not account for areas being used by your superclass to draw things such as frames.

I also use a clip frame to eliminate drawing outside of my object, then release this clip frame after I have finished drawing. If you need to do this then look at MUI_AddClipping(); and MUI_RemoveClipping();.

MUIM_HIDE:

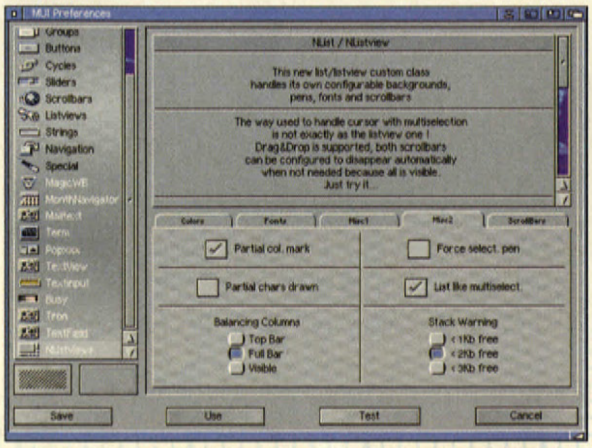
The following methods are destructor pairs to the earlier methods. MUIM_Hide is the destructor for MUIM_Show. Your object will receive MUIM_Hide just before the window is closed. Release any resources that your object allocated in MUIM_Show here.

MUIM_CLEANUP:

Here you need to release any display dependent resources. If you allocated pens, you would release them here.

You would also reject any requested IDCMP here that you requested in MUIM_Setup. Your object still might not see an OM_Dispose yet, since a user could just be iconifying or switching the screens that the window is on.

MUI has a set of internal objects that you may use. Some have shortcomings, like MUI's listview class, which doesn't have a horizontal scroller. Gilles Masson decided he could do better and developed NList.mcc. You can contact him at masson@iut-soph.unice.fr for further information.



You don't want to release resources that your object needs to keep. Your object may see a MUIM_Setup next when the window that the object is on gets uniconified or switched to a different screen. You need to test whether your object can be iconified or can switch screens.

OM_DISPOSE:

This is the method that tells your object that it is no longer needed and it should release any remaining resources that were not released in MUIM_Cleanup. Usually buffers stored in the object's private data would be released here.

OM_SET AND OM_GET:

There are several other methods that your dispatcher will see while your object is active. OM_Set and OM_Get are how programs can get or set attributes in your object. The attributes would be stored in your object's private data area. If a changed attribute affects the appearance of your object, then your object should call MUIM_Redraw (obj, MUIM_DRAWOBJECT); on itself.

MUI has a notification class that takes care of notification events and your object can take advantage of this. When an attribute changes, you can then call the following method that allows for notification.

```
SetSuperAttrs( cl, obj,
MUIA_<class>_<attribute>,
<value>, TAG_DONE );
```

Now programmers who use your class can set notifications based upon attributes in your object. I use this in ImageMap.mcc – when a user selects a new tile then the class does a SetSuperAttrs(); The detection of a user selecting a new tile is handled in the following method.

MUIM_HANDEINPUT:

Any requested IDCMP events would be handled here, including key strokes and mouse events. If they are mouse events, your object needs to check that they are occurring inside your object with the macro, _isinobject(). Additionally, the co-ordinates that MUI passes to this method are not referenced to your object but to the window that your object is in. Look in MUIDev.guide for a nice example of MUIM_HandleInput. You now have the tools to make your own public or private MUI custom class.

When you get more comfortable with programming using MUI, you may start to look at MUI's methods of dragging and dropping MUI objects. I use drag and drop in ImageMap.mcc and you are certainly welcome to look at the source code. In case you failed to get the source to ImageMap.mcc or any of the example programs, they are all at ftp.us.vapor.com in /pub/MCC/ImageMap/.

NetBSD

ON THIS MONTH'S CD AFCD24:-In_the_Mag-/NetBSD

Chris Livermore explains why there's such a palaver over Java in the final part of this tutorial.

Unless you've spent the last few years living a life of seclusion in the Tibetan foothills, you can't have escaped hearing about Java in the computer press and how it's going to revolutionise the computer industry. While they are only too happy to tell you how great Java is, most articles seem to gloss over the important issues, like what exactly Java is and how it intends to carry out this so-called revolution.





This simple applet acts much like a high tech "etch-a-sketch". Completely pointless, but good clean fun.

Quite simply, Java is a programming language. However, unlike any other programming language, Java has been designed to run on any computer platform without requiring any changes being made to the program code itself, something many software developers have been wishing for for many years.

More importantly for Amiga users, it means that an Amiga capable of running Java programs would not be limited to programs developed specifically for the Amiga, but could also use the vast range of Java software developed for the PC and Unix market.

With the rapid development and popularity of the Internet, Java has quickly established itself as one of the most popular programming languages. The multitude of different computer platforms connected to the internet and the ability to include Java programs, known as applets, as part of a web page have meant that Java has become an essential part of many web pages. Some sites on the world wide web will just not work properly if you don't have a Java enabled browser.

Java's ability to run on any platform is due to the way in which its programs are executed. The Java source code is compiled into byte-code or j-code.

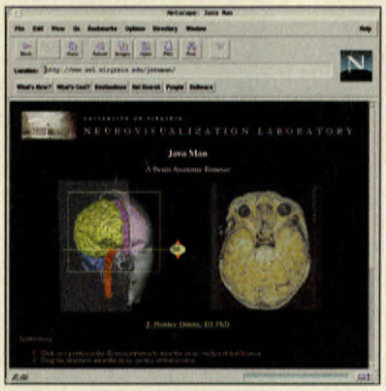
Whereas most compilers optimise the code they produce for the computer platform they are running on, the Java compiler produces code in a universal format. This j-code can then be run by a Java "virtual-machine" or a "Just In Time" (JIT) compiler.

A Java virtual machine provides an environment in which Java code can be executed safely, whereas a JIT compiler converts the j-code into machine specific code milliseconds before the instructions are executed by the CPU.

While Java claims to be a multi-platform programming language, a Java Virtual Machine or JIT compiler must

> "Some sites on the world wide web will just not work properly if you don't have a Java enabled browser."

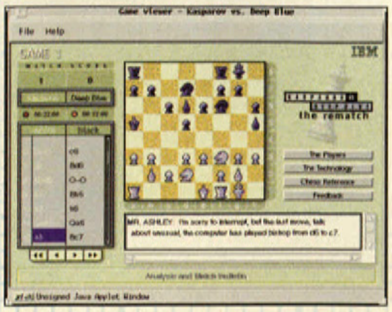
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Here we see what really goes on inside Ben Vost's brain!

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Thanks to Java, you too can pit your wits against the greatest chess players of all time. Complete with pointless commentary.

first be developed for each specific computer platform that wishes to run Java code. This is why the use of Java is almost non-existent on the Amiga.

Sun Microsystems, the company behind the development of Java, have put all their effort into producing Java virtual machines for computer platforms such as Windows and Unix. However, it is possible to license Java from Sun to develop your own Java virtual machines, and that is exactly what Haage & Partner and Finale Developments have done.

There are currently only two real options for Amiga owners wishing to run Java – Guava and Kaffe, and both are unlicensed Java implementations. This means that while they cannot guarantee to be 100% pure Java, the source code for them is freely distributable. It is possible to get both working under AmigaDos, using ADE (the Amiga Development Environment) and under NetBSD by simply (well, with a bit of tweaking) compiling the code.

Both Kaffe and Guava provide Java development environments to run standalone Java applications, but unfortunately they don't provide any way of running web-based Java applets from within a web browser.

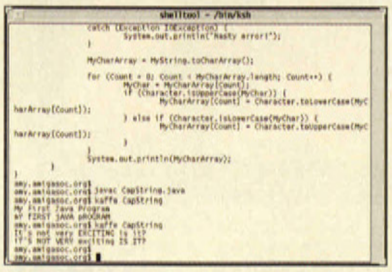
At this point it's worth mentioning JavaScript, which actually has nothing in common with Java. It is an interpreted script language, developed by Sun for use in web pages. It lacks most of the features found in a full blown programming language such as Java.

Most pages use Javascript for simple cosmetic improvements like animated buttons that change colour when you move your mouse over them. The next revision of Amiga browsers promise JavaScript support as standard.

Microsoft implemented their own scripting language, JScript, in their Internet Explorer browser. It is similar to, but incompatible with, JavaScript. Neither Kaffe nor Guava support JavaScript (or JScript).

Included on this month's CD are two versions of Kaffe, a pre-compiled binary of Kaffe 0.8 and the source code for Kaffe 0.9.2. Kaffe 0.8 is compatible with JDK1.0, the first "official" Java release from Sun.

However, the current release of Java is JDK1.1. Sun realised that version 1.0 wasn't quite good enough in certain areas and so made some fundamental changes in release 1.1. Most of these



This rather boring screen is about all you'll be able to do with Java 1.0.

Listing 1 CapString.java

```
import java.io.*;

public class CapString { public static void main(String[] args) { String MyString = ""; DataInputStream MyDS = new DataInputStream(System.in); int Count; char MyCharArray[]; char MyChar;

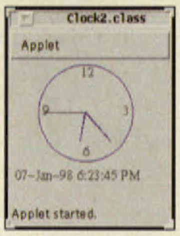
try { MyString = MyDS.readLine(); } catch (Exception IOException) { System.out.println("Nasty error!"); }

MyCharArray = MyString.toCharArray();

for (Count = 0; Count < MyCharArray.length; Count++) { MyChar = MyCharArray[Count]; if (Character.isUpperCase(MyChar)) { MyCharArray[Count] = Character.toLowerCase(MyCharArray[Count]); } else if (Character.isLowerCase(MyChar)) { MyCharArray[Count] = Character.toUpperCase(MyCharArray[Count]); } } System.out.println(MyCharArray); } }
```

Listing 2, a simple Java program

```
public class HelloWorld { public static void main(String[] args) { System.out.println("Hello world!"); } }
```



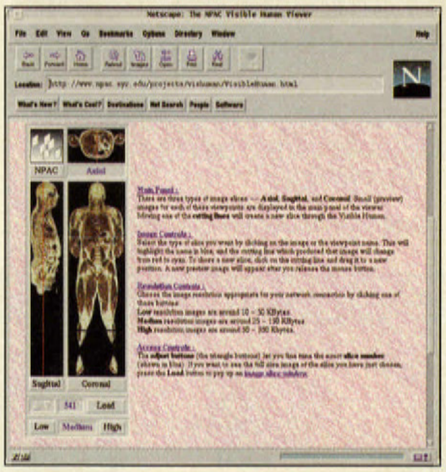
Yes, it's a clock, but not just any old clock. This is the world's first multi-platform clock – but it's still about 10 seconds too fast.

The Visible Human project is one of the more famous Java applications. It's actually fairly useful too.

were in the way the Java VM handled calls to the underlying operating system.

Unfortunately, this means that any Java 1.0 code that does anything more exciting than printing a few lines of text will probably break on version 1.1. Kaffe 0.9.2 is JDK1.1 compatible but it's a real pain to compile under NetBSD.

The problem seems to be caused by the way the "ld" command handles libraries under NetBSD. It can easily be solved by changing the line that reads LDTAIL = -lm -lc to read LDTAIL = -lm in the Makefiles in the following directories listed below: packages/tjwassoc.co.uk/APIcore/lib, packages/tjwassoc.co.uk/APIzip/lib and kaffe/kaffevm. You may also need to remove the compiler flag "-O2" from the Makefile in kaffe/kaffevm if you have less than 32 Megabytes of memory.



Listing 1 shows a simple Java program that converts uppercase text to lowercase and vice versa. I'm showing you this program instead of the obligatory "Hello World" program to illustrate the differences between a language such as Java and the scripting languages like *Perl* and Shell scripts which we looked at previously. You will remember that the case conversion script we wrote in chapter 4 was little more than 3 lines of code. You will also notice the similarity between the Java code and that of C or C++.

Java may look like C/C++ but it lacks many of the functions of these languages, such as typedefs and operator overloading. In fact, Java acts more like dynamic languages such as Smalltalk and Lisp. Unfortunately, to cover any more then the very basics of Java would require six more tutorials, and this is my last (for now!). I have included as much Java documentation as I can get my hands on, and put it on the CD for you to browse at your leisure.

So is Java the future of computing? Maybe, because it's certainly growing in popularity day by day. So far, however, there have been no "killer applications" written using it. Current Java programs have a tendency to be slower than their machine specific counterparts as they need to interpret each instruction before it can be executed. As CPUs get faster, then it's likely that Java will become more widespread. Sun plan to develop a CPU that will run J-code but things aren't going as well as they might.

Microsoft, who have licensed Java from Sun, have recently produced a version for Windows that produces J-code that will runs exclusively on their Virtual Machine, which destroys the entire idea of Java.

AND FINALLY

NetBSD 1.3 was recently released, slightly behind schedule. The full source and binary distributions are included on this month's CD. If you haven't got round to installing NetBSD yet, then now is the time. If you've got a previous version then make sure you read the instructions for upgrading first.

You will probably want to back up at least your /etc directory to preserve your system configuration files. An in-depth installation and upgrade guide will be provided on the AmigaSoc UK site as soon as I've installed 1.3 myself.

Also included on this month's CD you will find a selection of utilities that didn't quite make it onto any of the other CDs. These include Samba, a utility for mounting networked PC disks and printers, and BFFS, an Amiga filesystem which will enable you to read your NetBSD partitions from within AmigaDos.

Many thanks to Andrew Elia for his help.

PPaint *Special*

In a one-off special, Nick Veitch explains how you can retouch all of your old images and turn them into glorious colour.





We had a letter a few weeks ago imploring us to show how you could colour greyscale images in *Personal Paint*. We have had a number of queries along these lines recently, so here is a special one-off tutorial to do just that.

I have to point out that *PPaint* is by no means ideal for this as it lacks proper alpha channels, but it can be managed after a fashion (and with a great deal of hard work).

It all boils down to managing your palette and selectively colouring parts of the image. This is made slightly more tricky because paint packages deal with colours in standard planar bitplanes, so it's impossible to adjust the colour of a particular area. You have to employ a double buffer approach, which is outlined in the text.

> It all boils down to managing your palette and selectively colouring parts of the image.

The results may not look totally realistic but they are often more eyecatching and stylish than the original. You can use this technique for a variety of different situations, such as posterising or applying fog effects.

If you have any more requests, just drop us a line or email us at: amformat@futurenet.co.uk with the subject "Creative" in your email.

REMEMBER THE PALETTE?



Colourising an image shouldn't require any actual painting, just fiddling with the colour palette. Check back on previous tutorials to find out how this works.



Also, from the colour>palette >adjust menu, you can adjust the whole range of colours. This is useful to get the initial tones right, but will probably look too flat as the shadow tones are lost.

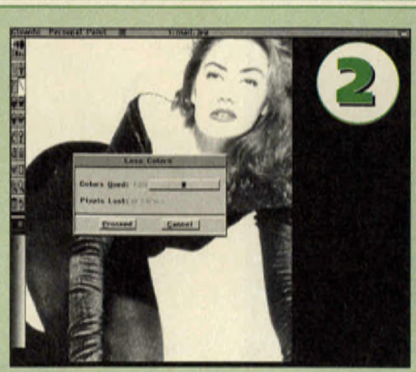


The best technique is to use both. Adjust the palette first, then replace the shadow tones by using a colour spread or gradient from the palette menu to create a non-linear range.

PUTTING THE COLOUR IN A YOUNG GIRL'S CHEEKS



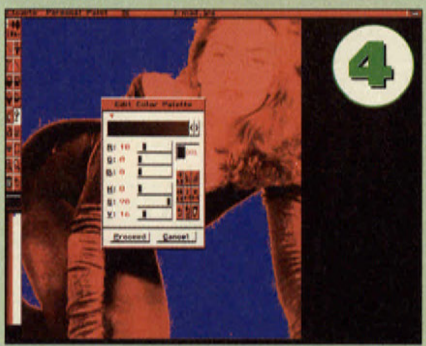
The first thing to do with this particular image is to clear up the outline of the shoulder. At the moment it is non-existent, so I have created an outline in a mid-grey.



You'll probably find that your greyscale image has 256 colours but doesn't use them all. It is advantageous to use the Colour>Less colours menu option to reduce it to 128 or so and save.



Flood fill the background with some solid colour. This isn't essential but it will make things easier later on if you do, especially if you want to strip in a new colourful background.



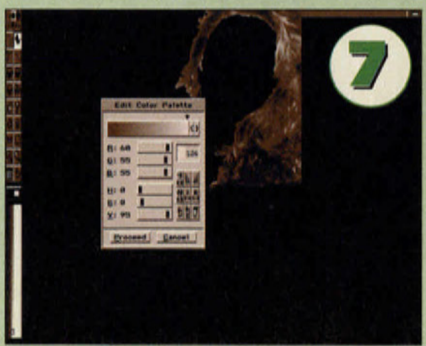
I've cleaned up the background for clarity here, but you can leave it if you like. Now make a spread of reds over the grey colours to make a nice dress for Mädchen.



Carefully cut out the dress only as a brush, load in the grey image again and paste it down. You could use the spare page if you have memory as it's faster. Use Colour>Merge.



Save again (or swap pages) and load the original. Now cut out the hair. This is very tricky, but don't worry as you can blur the edges at the end. Just don't get too much of the background in.



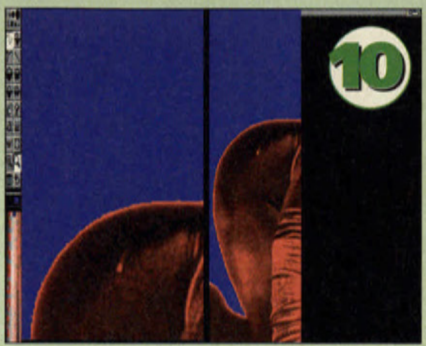
A subtle range of browns would be nice for the hair. You don't have to do the range in one go, so you can choose specific mid-tones for a better and more natural effect. Experiment.



Load up the partially coloured image and perform another colour>merge with the brush. This shouldn't affect the overall quality of the image too much.



Position the hair carefully. Remember you can use the hair brush (sorry) to delete the hair area from the main image, so the face will match exactly when you colour that.



I won't go through the procedure again for the skin – you get the idea. When the major areas have been done, you should check the edges for any imperfections.



Once you are happy with the edges, there are a few more bits to do – mouth, eyes, etc. You can use the ARexx transparency in *PPaint7* to good effect here (fill the background with a solid...



...colour and use a partial transparency brush). Small things like the eyes can probably be done by hand – it's only a few pixels after all.





MailBag

Send your letters to: Letters To The Editor • Amiga Format • 30 Monmouth Street • Bath • Somerset BA1 2BW or email to:amformat@futurenet.co.uk – putting 'Mailbag' in the subject line.

SEND US	SPARE US
Ideas for the mag	Complaints about lack of advertising
Your own Amiga adverts	Comments about how long it takes
A completed subscription form	*AF* to reach Timbuktoo
Things which make some sense	Nonsense
Comments and queries	Technical problems (address them to Workbench)
Letters via the Internet	Letters about the Internet
Interesting uses of the Amiga	Dull uses of the Amiga
Amigas you have spotted in shops	Amigas you have seen on TV

THE WORM HAS NOT RETURNED

Many games have recently been released on other platforms which the Amiga could easily run, but no Amiga versions of these games were released or are even planned to be released. Why?

It's not that the games wouldn't sell because, as you at *AF* know, the Amiga market is still alive and well, as the sales of your magazine reflect. No, it's because even if an Amiga specific version of, say, *Worms 2* was produced, which has just been released on the PC, there are virtually no distribution channels left in which to get the games sold.

Only one or two high street stores and a few independent retailers still stock Amiga items.

This isn't something I have just made up as this was the response many software houses like Team 17 gave as to why they were no longer developing titles for the Amiga.

So how do we solve the distribution problem? Well, it's fairly straightforward and something that's been done before. Simply put Amiga versions of the software onto PC CD-ROMs which can then be put on the shelf with other PC-only software, instead of having a shelf in the shop dedicated to Amiga games. Then even shops that don't stock Amiga titles would still be inadvertently stocking them.

This would also be environmentally friendly as only one CD case and instruction manual would be needed, cutting down production costs for the software houses.

Since a CD can hold about 600Mb of data, of which only about 5 to 10Mb is actual code, with the rest filled up with FMV clips and audio files, surely 5Mb could be put aside for the Amiga code.

If some form of freepost registration card was included then they could get a good idea of how many Amiga titles are sold and what spec machines people are using.

It has been done before in the US with Mac and PC titles being included on the same CD, so there really is no good reason why it couldn't be done here.

M Llewellyn
Manchester

The reasons why games are no longer stocked in many shops, and why many publishers have left the market, have been fairly well discussed in the past.

Including Amiga versions on the same CD is a good idea, but as many of the major developers no longer have an Amiga development department, the logistics of this would be difficult. Also, it would make tracking the sales rather tricky too – how would you know if people had bought the game?

But as most of the multi-platform games which are being released on the Amiga are actually being licensed by people such as ClickBOOM some time after the original release, it becomes a bit impractical. However, EIDOS for example, could have done just that with Championship Manager 2. *But then you'd probably get PC owners trying to install the Amiga files onto their disks and wondering why it didn't run.*

NO SECOND PRIZE

I remember back when prizes were given for spotting Amigas... I probably still have the issue.

Flicking through the Young Telegraph supplement of the *Daily Telegraph* (Jan 3rd) I noticed an article on the increasingly fashionable worry about strain caused by using a computer.

Most of these articles foolishly warn about strain caused by using a mouse which is placed next to the keyboard, and assuming you're too thick to move the keyboard out of the way in fear of damaging your shiny new Pentium, you stretch over the big Win95 monstrosity and thus damage your arm. Buy a keyboard with a trackball in the centre, they say. Or save loads of cash and just move the keyboard out of the way – it even has a plug so you can take it out completely.

In the "wrong" picture, a young girl was shown slouching in front of some old thing with a monitor, but in the "correct" picture, a keen, industrious young man was shown working hard on his A500, no doubt as it was better than the 80x86 junk in the other picture. Where might their picture ed have found such old photos? At the top of the page, incidentally, was a headline saying "snowed under".

P Money
N Lincs

Yeah, once. We gave that up years ago, because too many people were spotting them, or spotting the same one. And we ran out of T-shirts.

Actually, I use a trackball. Much better than a nasty mouse. You hardly have to move your arm at all, which suits incredibly lazy people like me.



Worms 2 on your Amiga? Don't hold your breath, it isn't very likely to happen...

FALLING STANDARDS

I am writing to let you know about a few things that I think spoil my Amiga 1200. Firstly, no standard joypad like the Sony Analogue Pad or Nintendo 64 Joypad. I know if I had something on similar lines then I would be far more able to develop games software for my Amiga and others, and the standard of the games would be equal to that of console systems.

Thirdly I think that if the hardware

Continued overleaf ➡

for the Amiga was more standardised it would also be a lot simpler to develop software for the system, and the Amiga might become a bona fide platform for future developments of the gaming scene.

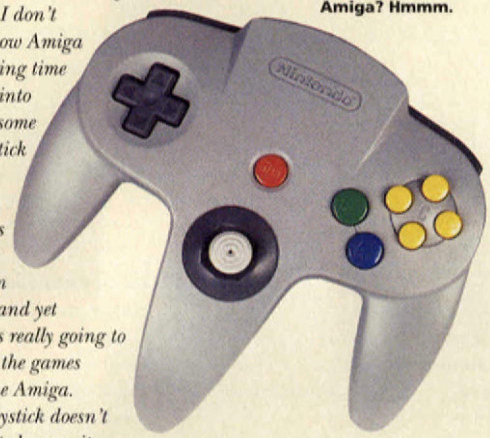
A J Robinson

Um, sorry, but isn't that just nonsense? I don't really see how Amiga Inc. investing time and effort into designing some sort of joystick which is somehow the same as an N64 or PlayStation controller, and yet different, is really going to rejuvenate the games scene on the Amiga.

The joystick doesn't render the polygons, it doesn't read the CD, it doesn't play back FMV and it doesn't perform trilinear or even bilinear mip-mapping. If you want to raise the standard of games, what you really want is an Amiga which comes equipped with a CD-drive, a faster processor and a graphics card as standard.

I have ruthlessly deleted your second point, as it has been covered many times in previous issues.

Your final point does have some merit, but then again, Amiga's are fairly standard compared to, say, the PC. There are only half a dozen different base models you could own. The processors are mainly plug-in replacements. CD-ROMs and hard drives are broadly similar in terms of the way the Amiga accesses them, no matter what machine you have.



Is a snazzy joypad going to completely revitalise the games scene for the Amiga? Hmmm.

SNAKE OIL

One teensy quibble over a review... The Viper530 (and 520) has a little sting in the tail for all those of us who own DMA hard drive controllers that plug into the side port – THEY DON'T WORK TOGETHER! This is not so much of a problem on the 530 as it includes a SCSI port, but it's a real pain on the 520.

As the proud owner of a GVP HD+ with 50Mb Quantum and 4Mb RAM, I've been happy with the setup (apart from the speed, and the graphics, and the sound...) but as a poor student and then a poor, unemployed ex-student, I've had difficulty in getting the cash for upgrading. But here came the answer to those speed problems (well, almost) – the Viper 520. After fitting, I was impressed with the speeds reported by AIBB (up there with an A3000!) But plug the GVP in and, crash – no boot, nothing.

But help is at hand as I've discovered a 'hack' that gets you booting up and sort of running. If you disable the fast RAM on board by setting the jumper on the Viper, the GVP boots up and Workbench runs OK. Some programs aren't too happy and cause the HD controller to throw a fit, (drive light stays lit, no further activity) but at least I can now enjoy WB3.0 (but can't upgrade as the ROMs aren't socketed!) and I'll still have to buy a 2.5" IDE drive. At least I've got access to all my data.

Other than the incompatibility, I'm very happy with the 520 and I'd thoroughly recommend it to any A500 owner – although if you can afford the 530, why not get a second hand A1200?

Philip Sykes
Halifax

I've never heard of a Viper with a sting in it's tail, but I think I get what you mean. Thanks for pointing that out. Sadly, our A500 HD controllers have long since passed into the great car-boot sale in the sky, so the 520 wasn't tested with one.

IDE LIKE A CD

I am a firm believer in the Amiga. I own two A1200s and three A500s.

My main computer is an A1200 that I put in a tower. It has a 540Mb HD, 10Mb of RAM and a CD-ROM. CD-ROM you say? Well yes, it is an IDE ROM. I buy your magazine and have all the CDs up to number 18. My problem is that the 1200 is IDE and the only way you can get the stuff to run your CD ROM is to find people in Germany or Italy, meaning IDE-Fix or ATAPI PAP 300. Seeing that it is the Amiga, I don't know why GATEWAY 2000 hasn't brought out the software to run the IDE CD-ROM.

Could you please put the full version of any IDE CD-ROM software on your next CD-ROM for us in Australia? It's not like England where you can walk into a shop and buy just what you need.

I hope you can help me with a full version of any IDE CD-ROM software so I can get rid of all the nasty requestors on my screen.

Tony Leishman
Australia

AmiCDFS2 is included on our cover CD every month – I don't know what more we can do about that. If you want to register for Shareware in Germany, the safest way is by an international money order (if the recipients don't accept credit cards).

Having problems using our fantastic cover CD on IDE CD-ROMs? Try using the version of *AmiCDFS2* which is included on the CD every month.



THE GAME THAT WON'T DIE

After reading a letter from Keith Forrester (Mailbag, *AF106*) I was prompted to ask some questions myself.

1. You said that the source code supplied on the cover CDs for *Alien Breed 3D 2 – The Killing Grounds* was in the C programming language, so would

Sabrina Online by Eric W. Schwartz ©1997 "The beauty of American Health Care"



it be possible to compile it to run on a phase 5 PowerUp card and how difficult would it be to do?

2. Have Team 17 any plans to do a Power PC version and, if not, would someone else be able to do it and release it as PD?

I think a PPC version of *Alien Breed 3D 2* would be a good way to sell PowerUp cards as the original 68K version was a great game (much better than *Doom*) but was too slow in full-screen mode unless you had a fast CPU (25MHz '040 or better).

The PPC will make for great games as the minimum spec they need to be written for is a PPC603e at 175MHz, which is higher than the minimum spec for most PC games which are written to work on 90MHz Pentiums.

Also, here's a small tip for anyone who has bought an Eyetech tower for their Amiga 1200. If you are using your original 1200 floppy as DF0: but find it looks ugly without the faceplate (and the disks get stuck in the drive with the faceplate in place) then why not buy a second-hand Amiga external drive?

Just take it apart and fit the drive from inside it into your tower as DF0: using the cables which Eyetech supply. It definitely looks a lot more professional.

Finally, do you know where I can get a copy of *Final Writer '97* from?

Mr M Llewellyn
Manchester

MISSION FOR PERMISSION

Recently I've been doing a considerable number of little movies (done with *Imagine/Lightwave/Brilliance/ImageFX*) and I've found the best thing to make them into demos is *ScalaMM400*, but I don't know if I can distribute the *ScalaMMPlayer* or not, because it doesn't really mention it much in the manual. Would it be safe for me to add the *ScalaMMPlayer* to my archives so people can watch them, or would I have to add this sort of thing separately?

Jamie Bentley
Australia

Ask Scala (+44 1920 48481). They wouldn't be happy with us to give out blanket permission for use of their software, but if you have a legitimate reason for wanting to distribute it, give them a call and explain. They're jolly friendly chaps really.

Alien Breed 3D 2 – well, one thing's for sure, Team 17 won't be producing it, or any other Amiga games. Ever.

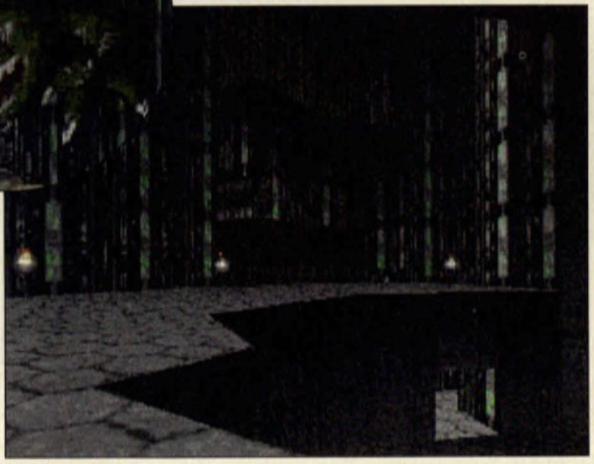
1. *It is written mostly in C, although some bits seem to have been written in assembly. Frankly, as the source is so badly documented, it's difficult to tell.*

2. *Team17 have no plans to produce any Amiga game again, ever. I'm sure they are not going to be too fussed if* AB3D2 *is recompiled for the PPC.*

To actually recompile the source isn't too difficult, providing you can make sense of the files. To get it to run better on the PPC will require a compiler that supports PPC (at the moment SAS/C or StormC 3) and, if you want to make it much faster, some knowledge of how the PPC works. Good luck!







OVER THE EDGE

I read this letter in *Edge* magazine which really infuriated me! It was from the September '97 issue, which I bought to check out the new *Blade Runner* game from Westwood Studios and it was obviously written by an evil PC owner who wanted to stick the knife in.

Now I know *Edge* magazine hasn't reviewed an Amiga game for ages (or centuries), but this person compared the Amiga to a 3DO (stupid man) and he boasted that he 'converted' lots of his friends to get rid of their A4000s and get PCs. He said that because games like *Tomb Raider* and *Command and Conquer: Red Alert*, are not likely to be seen on the Amiga, then the Amiga must be dead!

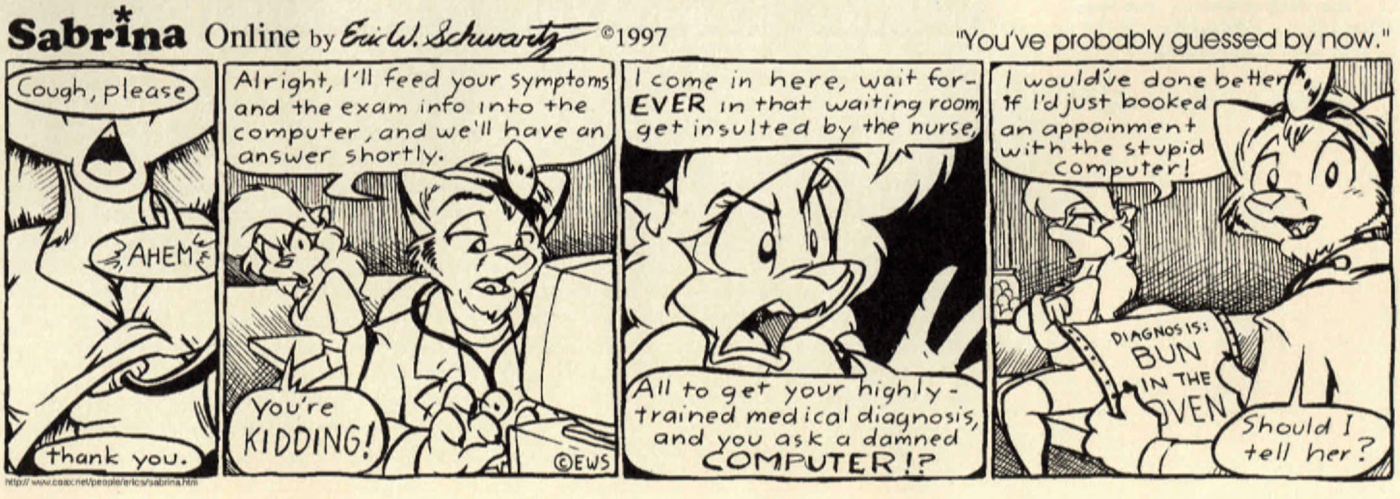
I wrote a good letter in retaliation, but I don't think it was published. I believe that *Red Alert* is not really graphically stunning anyway (if you ignore the pointless FMV sequences) and I think it is definitely possible to do this game on the Amiga. In fact, I want to learn how to program in Blitz Basic (or 'C') and make the game myself!

Another thing. Have you ever thought of selling your coverdisk CD-ROMs separately, in the "Special Offers" section of your magazine? The reason for asking is because I am saving up (still) for an A1200 (or better, if Gateway 2000 get their act together) with a CD-ROM drive and, at the moment it doesn't make much sense for me to buy your CD-ROM issue.

As a result, I feel as though I am missing out on perfectly good CD compilations. If you can order back issues, then surely you should also be able to order back copies of the older CD-ROM coverdisks?!!

Christopher Hindley
Flintshire

Continued overleaf ➡



Snippets

Please give away some of the brilliant new Amiga Logos in your excellent magazine. After all, there are now new Amigas and new software so how about a new look for the older Amigas? Keep up the excellent work.
PS. Is it possible to put an Amiga 600 into a tower case?

Ross
Perthshire

I was cruising through the latest issue of *Focus* magazine last week and what should I come across but an article about the Amiga. It's not exactly super-optimistic, but the overall tone is positive. Anyway, you can read it for yourself as I've enclosed a copy of the article. Just thought you'd be interested.

Rob Green
Tyne & Wear



Technology

The Amiga has a reputation of killing off its makers, but Gateway 2000 still wants to revive it. Steve Boxer watches with hope

Games machine joins the herd

The Amiga never really discovered its own niche

Commodore: behind Chelsea and the Amiga

The Amiga getting fairly good coverage in science magazine *Focus*? About time, really.

I must, I must, I really must write in and praise the service given by Weird Science. Whatever I send for is sent back by return of post. Compared with some companies that don't seem to bother, even though they soon take your money, makes it even more worthwhile dealing with them.

J Seeney
West Yorks

Must you? Oh go on then.

I was recently sent a free copy of *PC Review* by your colleagues and there is software for every month of the year on a covermounted CD (not supplied to me with the freebie). December is *Wordworth 1.0* and the recommended system is: Pentium, 16Mb RAM, 5Mb HD space, CD and Win 95. You poor, sad PC people.

Alex Ratcliffe
<alex.ratcliffe@btinternet.com>

Well, you can hardly hold Edge *magazine responsible for what some of their ill-informed readers write, can you?*

I'm sure that the people trying to push the 3DO in Europe would have been very pleased if it had been like the Amiga! He also seems to be sadly unaware that the precursor to Command and Conquer *originated on the Amiga in the form of* Dune, *written by, er, Westwood Studios.*

Sad really. You'd think people would check their facts before they made a fool of themselves in public.

As to your cunning idea, I'm afraid it's a non-goer really. We produce the CDs, obviously, to go with the magazine. If we sold the CD on its own through back issues then we'd end up with loads of magazines with no covermounts at all.

As we generally sell almost all of our CD back-issues, this wouldn't really be a good idea.

Why don't you just buy the CD edition of the magazine anyway? Then you would have a back-catalogue of coverdisks ready for when you finally get round to buying a CD-ROM drive.



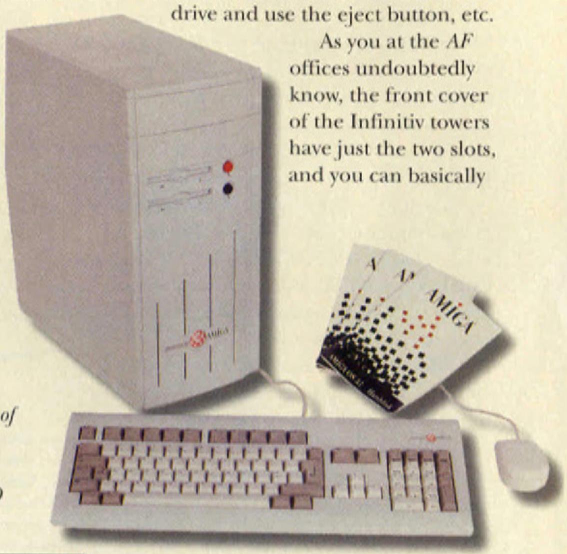


The Amiga game *Dune* was the precursor to *Command and Conquer: Red Alert*. Just remember that when PC owners try to show off.

TO INFINITIV AND BEYOND

I recently emailed Eyetech about their LS-120 drive, asking them if, after refitting the front cover of my Infinitiv A1300, I would be able to access the drive and use the eject button, etc.

As you at the *AF* offices undoubtedly know, the front cover of the Infinitiv towers have just the two slots, and you can basically fit a floppy through and that's just about your lot.



Will your gorgeous new tower system give you thick-disc problems?

Would I be able to fit the thicker 120Mb disks through this slot without problems and have access to the eject button on the drive without having to remove the front cover?

Anyone who wishes to email me, please feel free to do so.

I would love to hear from fellow Infinitiv tower owners! Please email me!

Simon Jenkins
<Simon@paddy1.demon.co.uk>

Hmmm. We don't actually have an Infinitiv tower, so it's a little tricky to test. However, I think I can say without any fear of contraflow that the LS-120 disks are no bigger than standard floppys and thus, if a floppy will fit through the gap, an LS-120 disk should also be okay.

WRITING TO AMIGA FORMAT DO'S AND DON'TS

DO write to us on any topic you like, as long as it has some relevance to the Amiga or *Amiga Format*.
DO use email if you prefer. The address is amformat@futurenet.co.uk, but be sure to use the subject "Mailbag" or your mail won't be read.
DO try to make sure what you are writing will be of interest to other readers, or that it raises some valid point.
DO make some sort of effort to make your letter legible. If we can't read it, we can't type it in.
DO keep your letter concise and to the point. If it is two pages of A4 then we'll probably get bored and bin it long before we reach the end.

DON'T bother writing to tell us that you agree with a previous letter if you aren't going to add anything to the debate.
DON'T write including a personal letter/disk to someone who appeared in Mailbag two or three months ago – we won't still have their address.
DON'T address technical queries or reader ads to Mailbag – your letter will be put in the wrong pile and then it may never come to the attention of our technical experts.
DON'T include an SAE. We are far too busy to reply personally and you are just needlessly giving money to the Post Office.
DON'T forget that we occasionally award a Star Letter prize, if your letter is funny enough or is jolly helpful.

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Amiga Mice

Replacement Mice £4.95
MegaMouse Plus (3 Button)..................................£9.95
"Well worth a tenner of anyone's money, penny"
CU Amiga "Amiga Superstar" Feb 1998

New Black Mouse 400dpi £7.95
Pen Mouse (ideal for CAD) £12.95



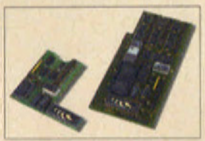
Ram Boards

RAM CARDS A1200

A1200 with clock and 4Mb *(not upgradeable)* £40.00
A1200 with clock 33MHz FPU and 4Mb £50.00
A1200 with clock and 8Mb £55.00
A1200 with clock, 33MHz FPU and 8Mb £65.00
33MHz FPU inc. crystal £10.00
FREE Chaos Pack (4 games on disk) with every Ram Card

Controllers

Catweasel MKII for A1200 – allows you to connect High Density Disk Drive fits on to clock adapter leaving IDE interface free for our 4 way buffered interface £49.00
Catweasel for A4000 ....£49.00
Buddha IDE Controller for A1500/2000/4000 ....£49.00
Catweasel plus Buddha for A1500/2000/4000 ....£69.00
Oktagon 2008/4008 SCSI Controller £89.00
Multiface III serial and parallel I/O card £79.00
PCMCIA (Easy CD) Controller* plus external case and software.............................£79.00
***Please ring for details**



New GI-Quatro Buffered Interface for A1200

Buffered interface for A1200 with full IDEFIX'97 software allows you to connect 4 ATAPI devices to A1200 Comes with two 40 pin IDE cables and one 44 pin IDE cable £39.95

"Amiga Health Warning" Fear not with our Buffered Interface

AlfaQuatro Interface

Specially made hardware and software. Includes IDEFix '97 software Allows 4 ATAPI devices, ie, 2 IDE hard disk & 2 IDE CD Rom to Amiga 4000 internal IDE controller...£39.95

Joysticks & Joypads

Amiga Joysticks **£9.95**
Amiga Joypads **£9.95**
CD 32 Joypad **£14.00**

Floppy Drives



External Floppy Drive for all Amigas £39.95
Internal Floppy Drive A500/500+ £25.00
Internal Floppy Drive A600/1200 ....£25.00
Internal Floppy Drive A1500/2000 (DF0 only) £30.00
Internal Floppy Drive for Tower user with face plate...£30.00

Winner of Gold Format Award in Amiga Format February 1997

Best pricing on CD ROM Drives & Hard Drives.

We can supply CD ROM solutions for ALL Amigas from A500 to A4000. Four top AGA titles free: Nick Faldo's Championship Golf; Syndicate; Pinball Fantasies & The Chaos Engine.

All our External IDE CD ROM Drives have built in power supplies (they do not draw power from your Amiga)

GI-Quatro buffered interface allows you to connect 2.5" or 3.5" drives with full registered version software (not a demo)



All CD ROM drives have play CD facility.

Limited quantity of external 2 speed SCSI CD-ROM with squirrel only £79

	External A600/A1200	Internal A1500/A2000	External* A500/A500+	Internal A4000
Eight speed CD ROM for	£120.00	£95.00	£95.00	£79.00
16 Speed CD ROM for	£130.00	£105.00	£105.00	£89.00
24 Speed CD ROM for	£140.00	£115.00	£115.00	£99.00

*(for A500/A500+ Alfapower hard drive controller and Hard Drive is required). A1500/A2000 supplied with IDE controller & software. A4000 supplied with AlfaQuatro interface & Full IDEFIX software.

New Products

Catweasel MK II
A lot faster and also allows GI-Quatro for 4 IDE Device buffered interface £49.00
"Want a VGA or Multiscan monitor, but want to watch tv on it too? Ben Vost gets best of both worlds with this rather oddly named box" AF Jan 1998
TV Amazing external Scandoubler with TV tuner, SVHS input, composite input and VGA input/output with infrared controller £89.00

Accelerators for Amiga 1500/1200
2030 Turbo - 25MHz with SCSI option .... from £99.00

Accelerators for Amiga A1200
1230-40MHz & FPU with 8Mb £99.00
1230-50MHz & FPU with 16Mb Blizzard £139.00
1240-40MHz & FPU with 8Mb £200.00
1260-60MHz & FPU with 8Mb £340.00
SCSI Harddrive 4.3Gig ....£259.00 Best Price
SCSI Harddrive 2.1Gig £189.00
Requires SCSI Controller
Oktagon SCSI Controller..£89.00

New 16 Speed PCMCIA CD ROM Drives for A1200/A600 ....£135.00

IDE Hard Drives for A1500/2000

Hard Drives plus Buddha IDE Controller
2.1 Gig ....£179.00 *Starbuy*
Hard Drives plus Buddha IDE Controller 4.3 Gig ....£149.00 *Starbuy*

IDE 2.5" Hard Drives for A600/1200

All 2.5" Hard drives come formatted and installed with Workbench, including IDE, cable, screws, software and instructions. *(please check for availability)*

170Mb..........................£59.00 *Starbuy*
810Mb..........................£129.00 *Starbuy*
1.0Gig..........................£139.00 *Starbuy*

Star Buy

IDE 3.5" Hard Drives for A1200/4000

1.6Gig	£120.00	3.8Gig	£189.00
2.1Gig	£129.00	4.3Gig	£189.00
3.2Gig	£149.00	*5.0Gig	£249.99

We will partition and format Hard drives and install Workbench. *5.0Gig will fit and work on Amiga Computers contrary to warnings given

(Amiga Format Gold Award winner August 1997)
(Amiga Format Gold Award for 3.8Gig January 1998)

Memory

4Mb Simms	£10	8Mb Simms	£20
16Mb Simms	£40	32Mb Simms	£70

Zip Rams *(suitable for A3000, Alfapower, At-Bus 2008 & Oktagons)* every 2Mb £40.00

Accelerator for A1200

Viper MKV 1230 50MHz plus SCSI interface
with 4Mb £149.00
with 8Mb £159.00
with 16Mb £179.00
1230 40MHz & FPU with 8Mb £99.00
1230 50MHz & FPU with 16Mb £139.00

Miscellaneous Products

Philips monitor to Amiga cable..........................£6.00
Printer cable £5.00
PC Keyboard Adapter £19.95
SCSI case with PSU £49.00
Boot selector switch for A500/2000 ....£10.00
44pin 3 connector cable £5.00
44pin 2 connector cable £3.00
40pin 3 connector cable 90cm £5.00
AlfaQuatro 3x40pin Interface & IDE cables..............£39.95
DD floppy disks (50) *including multicoloured disk labels* £13.00
DD floppy disks (100) *including multicoloured disk labels* £25.00
3.5" Hard Drive Kit for A600/1200 *+ Install software* £15.00
Diskbox to hold 10 discs £1.00
Animal Jungle design and Dinosaur design 2 in 1 Scanner/Mouse Pad *Can be used as a memo pad* ....£2.00 / £3.00
TV Amazing-
"Want a VGA or Multiscan monitor, but want to watch TV on it too? Ben Vost gets best of both worlds with this rather oddly named box" AF Jan 1998
TV Amazing external scandoubler with TV tuner, SVHS input, composite input and VGA input/output with infrared controller £89.00
VGA Adaptor £10.00
Amiga Power Supply 4.5 amp £15.00
Plain Wristrest £2.00
GI-Quatro buffered interface without cables or software £25.00
A500+ 1Mb ram card..........................£20.00
A600+ 1Mb ram card..........................£20.00
ROM Chip for A500 or A600 V2.05 ....£19.00
CDROM Drives (Bare) For internal fitting.
Requires interface and software
IDE 8speed £39.00
IDE 16speed £49.00
IDE 24speed £59.00
Chaos pack AGA: 4 great games **(on disks)** (The Chaos Engine, Syndicate, Pinball Fantasies, and Nick Faldos Golf). All Amiga Format Gold winners £5.00
Audio Cables for CD ROM's
Stereo jack (3.5mm) plug to 2 x RCA phono plugs 1.2 meter long..........................£5.00
Audio mixer 2 x RCA phono plugs to 2 x RCA phono plugs/sockets 1.8 meter long £6.00
2x RCA phono plugs to 2x RCA phono plugs 1.2 meter long..........................£5.00
Multipass OCR Software
suitable for all scanners and direct scanning support for hand scanners by Migraph, Golden Image, AlfaData and Power..........................£10.00

All prices include VAT. Please add £3.50 P&P for items under £30.00, £5.00 for items over £30.00, £8.00 P&P for Scanners, Speakers & Hard Drives, £10.00 courier for next day. Tax Free Export Orders Welcome.

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The Gallery

ON THIS MONTH'S CD

AFCD24:-ReaderStuff-/-Gallery-

Ben Vost sorts through another bunch of your amazing artwork, looking for the real gems...

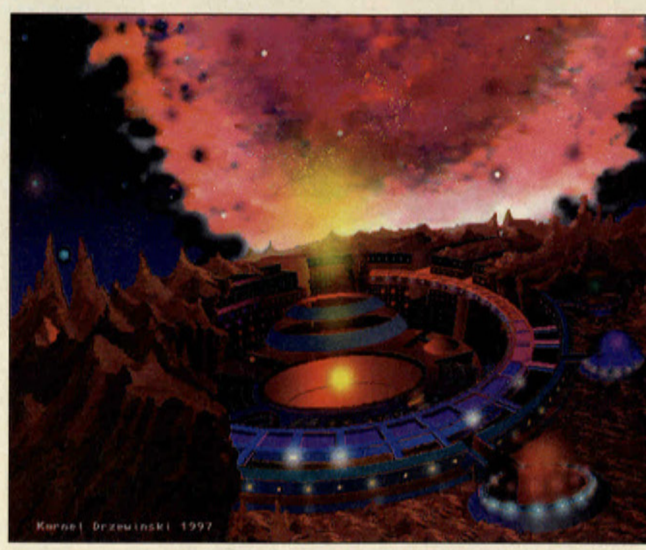
£50 AF Winner!

Pedro Gordinho
Miggy
Pedro's cartoony-style, mixing 3D with hand-drawn features, gives this image real flair. Well done Pedro!



Chris Haynes
Asylum
I particularly liked the brooding quality of this image with its message drawn in the dust. Truly excellent.

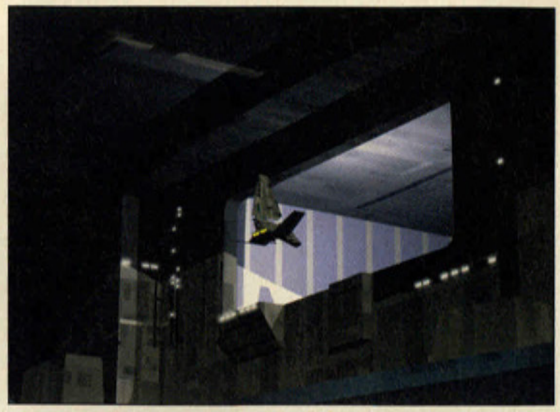




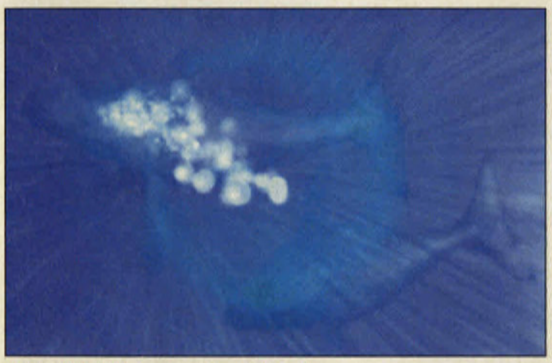
Kornel Drzewinski GalaxyCentre
Kornel's picture is even more impressive given that it was completely hand-drawn in *Deluxe Paint*.



Plane Crazy Happy Landings
This entry is so gorgeous it might well have won the reader prize except for the fact that we didn't get a real name or address on it.



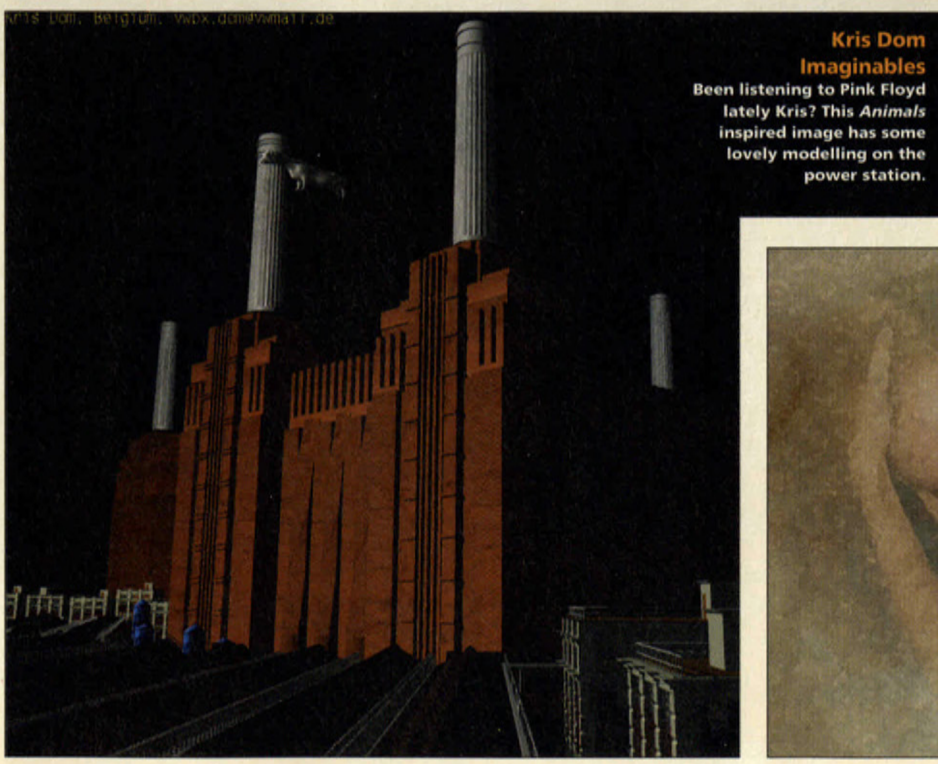
Trevor Taylor StationShuttle
You can find a lot more of Trevor's superb *Lightwave* and *Real3D* work on our CD this month.



Andy Watkinson Humpbacks
Andy regales us with another of his *Photogenics* masterpieces from an unusual angle. We like this one a lot.



Costas Pagomenakis Tavli
Very atmospheric. The only odd thing is that the bottle seems full even though there's Ouzo in the glasses.



Kris Dom Imaginables
Been listening to Pink Floyd lately Kris? This *Animals* inspired image has some lovely modelling on the power station.

Erik Anthony The Lady
Although this was a photo before it was manipulated, it now has a fantastic feel to it.



Readers Ads

Whether you're trying to raise enough cash for a PPC card or just trying to find a classic game, ***AF*** is the place to try first.

For Sale

● **GVP G-Force Amiga** 1500/2000 accelerator '030, 25 MHz FPU, £100 ono. Amiga 500+ and A500 HD+8 hard drive 2Mb RAM £140. Amiga 500 and memory upgrade, £60. Will exchange for other Amiga parts if of any interest. ☎ S. Young 01189 455009 or email scy@scysoft.demon.co.uk

● **Accelerator board,** Commodore C2630, '030 with FPU and 4Mb fitted. Goes into CPU slot of any A1500/A2000. £110 ono. ☎ Maurice 01494 534144.

● **A4000 '030 18Mb RAM,** 540Mb HD packed with software, quad speed SCSI CD-ROM drive, additional disk drive, loads of CDs and 3.5" disks. Excellent condition, £550. ☎ 01633 881413.

● **68030 accelerator board** for A1200. 8Mb, battery backed clock. Slots into CPU slot. 2 months old, excellent condition. £50 ono. ☎ 01495 228653.

● **SAS/C development system** version 6. Still boxed, original and complete. Any offers considered, plus postage (big box full). ☎ 01980 590832.

● **MicroIllusion Music X program,** original, box, vgc. Dr T's music software version 3.5, level II. All offers considered, plus postage. Will deliver if local. ☎ 01980 590832.

● **8Mb memory for Amiga 1200,** due to upgrade, £50. ☎ Aled 01270 256253.

● **AB3DII, Worms, Pinball Fantasies,** Populous, Heimdall, etc. Boxed originals, £10 each. Wordworth 6 £20, Imagine 5 with Impulse manual £40, Lightwave £50, Distant Suns 5 £15. 100s of coverdisks £2 each. ☎ 01405 860798 after 6pm.

● **Amiga 1200 with monitor,** mouse, 24-pin colour printer and lots of software. Excellent condition, £POA. ☎ Graeme Bain 0141 5526069.

● **31 boxed original Amiga games** £3 to £7.50 or £125 for all. 1.5m parallel printer cable (new) £5. 50cm SCSI 3-connector 50-pin cable £5. ☎ 01709 814296 for details.

● **Art Effect 2.0 £60,** Studio Professional II £25, both boxed originals with manuals. ☎ Mick or Sharon 01268 761429.

● **Canon BJ10-SC printer** and power supply. New ink refill. No parallel cable, £60. Buyer collects or pays postage. ☎ Andy 01604 791518.

● **Classic Squirrel interface,** £30 ono. 4Mb A1200 RAM card, £25 ono. US Robotics Sportster 14.4K modem, £30 ono. ☎ 01482 848368 or email ben@bstephenson.demon.co.uk.

● **A1500 desktop computer** with extra memory, 230Mb HD, twin floppy, external keyboard, £140. Will also give away my Commodore 1084S monitor to buyer for free if wanted. ☎ Davie 0141 5716468.

● **Alfapower A500 or A500+** HD mounting unit, full WB 2.1 disks, 8 installer, boxed, manual, £45. Also 2Mb A500 KS 2.05, discs, joysticks, etc, £45. Together, bargain £80. ☎ Bill 01762 344641.

● **A4000, '030, 6Mb RAM,** 120Mb HD, 8x CD-ROM, additional disk drive, 1084S monitor, Star LC2410 printer, loads of games, CDs etc. All manuals. £400. ☎ 0181 6514953 (evenings).

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Free!

● **A1200, 120Mb HD,** 68030/50MHz +8Mb RAM, 2x CD-ROM, 2 external disk drives, monitor, DOpus, Final Data, Worms, Settlers, pre-loaded, original discs included. Lots more software and CD-ROMS. Accept £550 ono. ☎ 01780 482710.

● **A4000 Cyberstorm 68060** 48Mb RAM, 800Mb HD, Lightwave 5, Imagine 5, DOpus 5, lots more software £850. 1701 monitor £250. A600 HD £80. Audio Engineer and Imager £50. Buyer collects. ☎ 01235 848412 after 7pm.

● **A600, 2Mb RAM,** Workbench disks, mouse, joystick, boxed with games and manuals. Will sell for £100 ono. ☎ Andrew 01278 787095.

● **Original Italian-only CD-ROMs:** Personal Paint, Aminet, Encyclopedia Grolier, F1 Licenceware, AGA Toolkit 97, Amiga Tools. CD32 games: Microcosm, Cannon Fodder, Liberation, Zool, Akira, Marvin's Marvellous Adventure and others. ☎ Claudio 06/5699919.

● **A600, 2Mb, 80Mb HD,** mouse, PSU, 14.4K modem, WB 2.04, £120. ☎ Pedro 0956 485174.

● **Games, all boxed, £5 each.** Grand Prix, Alien Breed 3D, Virtual Karting, Fears, A10 Tank Killer, F1 World Champ Edition, Ryder Cup Golf, PGA European Tour. £30 the lot. ☎ Mick or Sharon 01268 761429.

● **A4000/040, 20Mb RAM,** Cybervision 64/3D gfx card, scandoubler, 1700Mb hard disk, 4x CD-ROM, GVP SCSI card, 120W speakers, loads of extras, software and mags. £850 ono. ☎ Graeme 01292 475278.

● **A500+, 2Mb upgrade,** A590 CDTV, Workstation desk, mouse, joystick, software. Full working order, £120 ono. ☎ Chris 01283 547367.

● **Amiga 600,** 2Mb RAM with mouse, joystick, power supply unit and TV connector. Good condition with original manuals and system disks. Assorted boxed games. £125 ono. ☎ 01375 675231.

● **Amiga 1200 plus Blizzard board** 1230 II turbo, 50MHz, 6Mb RAM, external disk drive, Final Writer, Mini Office, CAD Designer and Real 3D. Also, A2000 with assorted games and joystick. All for £600. ☎ 01702 309449 (evenings).

● **Spectrum games on CD.** Around 3000 games with emulator for Amiga and PC, £10. I have several to sell. Write to Ian Otter, 5 Vaughan Avenue, Grimsby, DN32 8QB.

● **A1200 Eyetech tower system,** 540Mb HD, 4x CD-ROM, 68030 33MHz and FPU, joysticks, WB disks, mouse, two 3.5" disk drives, CM 833II 14" colour monitor. Also, A2000 keyboard and too much to mention, 1000s of games and CDs. Mint condition, £900. ☎ 0181 2522568.

● **Amiga CD32 plus CD Network** and others. £100 ono. ☎ 0181 7694997.

● **Colour stereo monitor,** Philips 8833II, boxed with all leads, manual, dust cover, £60. May deliver. ☎ Alan 0131 6681863.

● **Hard drive, Supra 500XP** for A500/A500+, 120Mb plus 2Mb RAM. All disks and manuals. Also, Amiga Shopper issues 1-40. Offers? ☎ Matt 0171 7903873 or email Matthew.Noble@btinternet.com.

● **A600, WB 2.1,** Apollo 620 accelerator, 28MHz + FPU, 6Mb RAM total. Games and utilities included, boxed, vgc, £150. Also Squirrel SCSI interface for A1200/600, £30. Buyer collects or pays postage for both items. ☎ 01425 655768.

● **A4000/'060 multisync monitor,** screen filter, 250Mb drive, 16Mb RAM, Cybervision 64-bit card, Vidi 12-RT, CD-ROM, joysticks, extra mouse and software. £1,100 ono. ☎ Gary 01652 651465 or email gbishop@enterprise.net.

● **A1200 version of Theme Park,** never used, with instruction manual and original packaging. ☎ 01793 849526 and ask for David (after 7pm).

● **Blitz Basic 2.1** plus Blitz User magazine, £20. External quad-speed CD-ROM drive with software and manual, £75. Contact Richard Campbell, 187 Jordanstown Road, Newtown Abbey, Co. Antrim, N. Ireland, BT37 OLU.

● **Seek and Destroy,** Fish, Lemmings, Banshee, £5 each. Gloom, Wizkid, Lotus 3, Heimdall 2 CD32, Microcosm CD32, £8 each. Knights of the Sky, Dune 2, Legends, Operation Stealth, Arcade Classics plus CD-ROM, £10 each. ☎ 0161 3049471.

● **Citizen Swift 200-colour printer** with software, £55. Apollo 1220 accelerator with 4Mb and FPU, £45 (speeds up your Amiga 400%). ☎ Stuart 0181 930 0532/5753.

● **A1200 85Mb hard drive,** 6Mb, Canon BJ200 printer, Philips 8833 II monitor, handscanner, Wordworth 6 Suite, MagicWB, Amiga Format since 1995, lots of software, £350 ono. ☎ 01642 618778.

● **A4000/'030, 8x CD-ROM,** 40MHz FPU, 18Mb RAM, 420Mb HD, separate IDE interface, lots of software, £1000 ono. No monitor, may swap for A1200. ☎ 01535 670516 after 8.30pm.

● **A1200 with software,** 365Mb hard disk, etc, in excellent condition, £150 ono. A500 software, games, office, coverdisks. Also, Spectrum +2 tapes and extras. ☎ 01253 692665 (evenings).

● **A1500 with monitor, £130.** A1200, £120. A500+, £50. All with software and manuals. Quad-speed CD-ROM drive, internal IDE, £20. Loads of boxed games. Ring for list. ☎ Rob 0181 9795612.

User Groups

● **Amiga movie club.** Send SAE for free disk. Fan club listing, filmographies, memorabilia and more. Amiga Movie Club, 42 Sedgemere Avenue, Coppenhall, Crewe, Cheshire, CW1 3YU.

● **Any SWOS fans out there** in Essex who want to start a multiplayer league? Any ideas where to play it? Possibly cup and transfers. ☎ Phil 01702 714174.

● **Surrey Amiga user group.** Newly formed group welcomes all Amiga users in the Surrey area, from beginners to the experienced. ☎ Rob Gilbert 01932 875336 or email gibie@arrakis.u-net.com for details.

Personal

● **Amiga contacts wanted** to share computer interests. West Midlands area. ☎ 01922 693558.

● **Contacts wanted,** all Amigas, to swap games, etc. Send list to C. Simms, 42 Anfield Road, Wrekenton, Gateshead, NE9 7AE.

Wanted

● **Amiga V-Lab video card** for A4000, Amiga 4000/2000 keyboard, good price paid. ☎ S. Young 01189 455009 or email scy@scysoft.demon.co.uk

● **Game, circa 1991,** called Skull and Crossbones by Domark Software. Required for pirate obsessed son! ☎ 01795 420937.

● **Solution to Speris legacy.** ☎ 01942 227264.

● **Nemac IV, Big Red Adventure,** will pay £10 each. Blood Net AGA, Sabre Team AGA, Christmas Dizzy, B17 Flying Fortress, Fire Force, AGA Experience 3, will pay £5 each. ☎ 0161 3049471.

● **Has anyone got Robin Hood,** an eight disk adventure game? Will buy or exchange. Please write urgently to: Mike Gray, 13 Alfred Street, The Hoe, Plymouth, Devon, PL1 2RP.

● **Utopia by Gremlin.** Will pay £10 for original in good condition. ☎ Anthony 01474 706114.

● **A Q install disk** for overdrive HD 1200. Have manual, HD works, no Workbench installed. Previous owner deleted contents by mistake. ☎ 01553 761864.

● **James Pond 3 for A1200.** Plus help for Universe and UFO Enemy Unknown. ☎ Neil 01346 512449.

● **68040/68060 accelerator** suitable for Amiga 4000/30. ☎ 01922 693558.

● **Monopoly, Backgammon** or other boardgame sims. Reasonable prices paid. 500+ compatible. Will also pay postage. ☎ 01945 410147 anytime.

● **A500 game Lotus Challenge II.** ☎ Jane/Dean 01594 834924.

● **Games for A1200,** especially Prince of Persia, Fate of Atlantis, Road Rash, Thomas the Tank Engine II and also any clipart. Alan Semple, 40 Wasdale Road, Millom, Cumbria, LA18 4JJ.

● **Shuttle, The Space Simulator.** Disk 2 missing, can anyone help? Will pay or swap original games (or Amiga hardware). ☎ Ross 01556 503441.

● **Accelerator card for A1500** or A2000. ☎ 01425 654161 after 4pm.

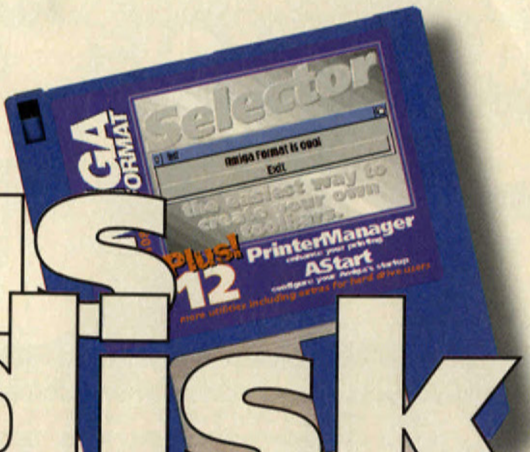
● **Manuals for ProData v1.18** or back issues of *Amiga Format* with ProData information. Willing to cover all costs. ☎ Michael 01504 262058 (24 hours).

● **Help me find a copy of CanDo 3.0,** even if it is used. I'm in Los Angeles, so please call me. ☎ Sabino 213 6510620. I will pay cash.

● **A500 manuals, A520 modulator,** A530 accelerator, GVP HD8 hard drive, X-Copy Pro v.3.3 documents (have original disk but no docs). A1200 hard drive users manual, Philips CM8833 Mk 1 or Mk 2. All gwo. ☎ 01582 475131.

ADVERTISERS INDEX

Serious disk





AMIGA FORMAT

This month's serious disk is packed with useful utilities including the brilliant **Selector**. David Taylor explains how you can use it to create a more sophisticated Amiga.

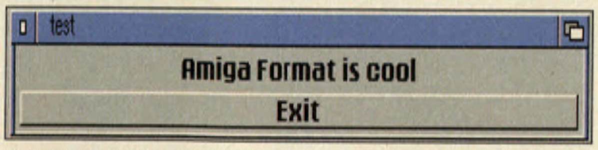
Selector

Many people have *ToolsDaemon* or similar programs, launchpads and the like. *Selector* is something quite different and can be used to work in conjunction with those types of programs or simply by itself.

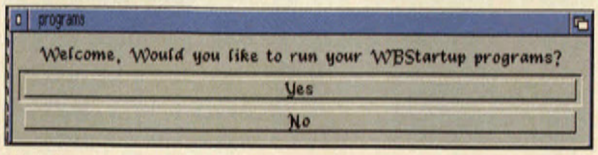
Selector is a simple command that takes its information from a text file. The text file uses commands native to *Selector* to easily set up buttons and requestors so you can quickly build an interface or a menu that does just about anything. You can even build ones that are dynamic and run *Selector* scripts that they make on the fly, like listing a directory and creating a set of buttons for the programs (see below).

The program is so easy to use that you can have your first project up and running in under a minute.

First of all, run the *SelectorFont* program to choose the font you want to use in your *Selector* projects. Now you need to copy the *Selector* command to your C: and then you need to open a text editor. You can use the Amiga's native Ed if you want. Simply open a Shell and type `"ed ram:test.sel <return>"` and it will open the editor and create the file for you.



This simple window just displays text and has a quit button, but it also only took 30 seconds to write.



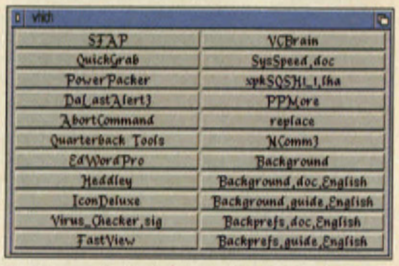
Slightly more complicated, this *Selector* script has a button that does something. The complex part is actually the AmigaDOS script that runs from the button.

Now type in the following commands: `Text "Amiga Format is cool" Button "Exit" Exit.` Save the file and then type into the Shell `selector ram:test.sel <return>.`

> **The program is so easy to use that you can have your first project up and running in under a minute.**

Buttons have the power to load other *Selector* scripts or AmigaDOS scripts, which is what makes this so powerful. You can easily make a program that asks if you want to launch your custom programs each time you start up.

Move your programs out of your WBStartup drawer into one called Start. This is not a default drawer so you can call it what you want as long as you follow the name through in the following example. Create a file in your text editor called S:Programs.dos. (the .dos isn't necessary, but it's useful for remembering that this is an AmigaDOS script rather than a *Selector* script). Now type: `list >ram:start.sel sys:start pat ~(#?.info) files lformat "run >nil: sys:start/%n" selector s:programs.sel` and save it. This is the AmigaDOS script that scans the directory for which programs are there and launches a *Selector* script.



This is a useful script that lists the tools from my tools directory, but it needs more work to remove the files that aren't programs.

We now have to write the *Selector* script. Create a file called S:Programs.sel and enter: `Gap 6 Text "Welcome. Would you like to run your WBStartup programs?" Startbox Button "Yes" "execute ram:start.sel" Endbox Button "No" Exit` and save this file. Now we can test it by typing into Shell `"execute s:programs.dos <return>".`

As you can see from the *Selector* script, we've done some new things here. We used the Gap command to say how many pixels we wanted between each button and we used the box commands to put a box around the first button. To make the script more powerful, go back to the AmigaDOS script Programs.dos and change it to: `list >ram:start.sel sys:start pat ~(#?.info) files lformat "run >nil: sys:start/%n" list >ram:which.sel sys:start pat ~(#?.info) files lformat "button *"%n*" *"run >nil: sys:start/%n*"" selector s:Programs.sel delete ram:start.sel delete ram:which.sel`

Now change the *Selector* script Programs.sel to: `Gap 6 Text "Welcome. Would you like to run your WBStartup programs?" Startbox Button "All" "execute ram:start.sel" Endbox Button "Choose individual programs to launch" load ram:which.sel Button "No" Exit`

This script now has an extra button. The second line of the AmigaDOS script

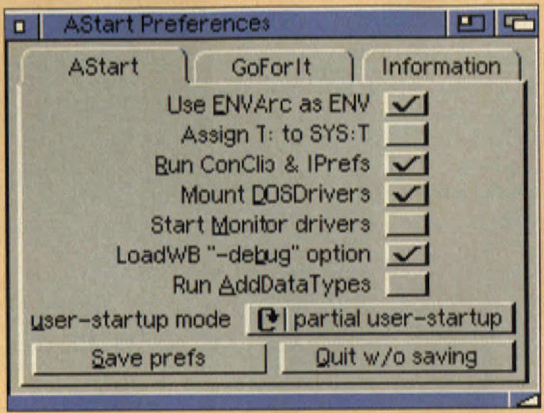
WHISTLESTOP TOUR

Here's a very quick rundown on the other programs that are on this disk. The fact that we haven't the room to go into detail by no means reflects on their usefulness, but *Selector* requires more explanation to get started with. You should also note that not all of these programs can be used on floppy disk only Amigas because some are designed for hard drive users.

There are actually more programs on the disk than we have room to show, so you'll have to check through them yourself to find the Print Manager, the brilliant Tool manager for icons, the launching utility, the new formatting tools and much more!

ASTART

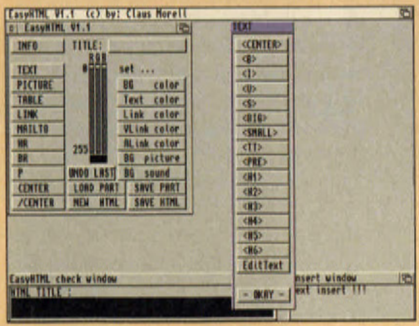
This is a very good utility that can be used to do the selection of programs you want enabled at startup much more effectively than the script we discussed in *Selector.* This allows you to choose your programs and vary your startup-sequence all from a Prefs program. The Prefs program requires MUI, but the program itself should run without it – it's still useful but you need to edit the Prefs manually.



This preference program makes it much easier to control your Amiga's startup-sequence and WBStartup programs.

CLICKCLOSE

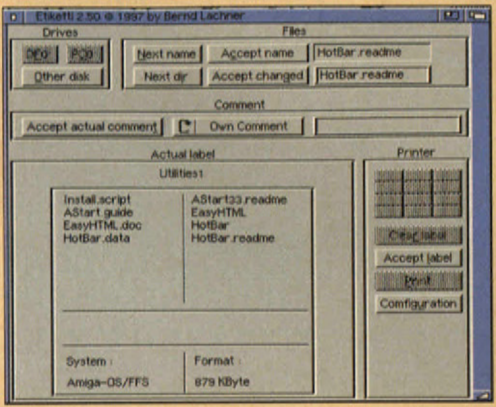
This allows you to open a program and simultaneously cause the Window that contained it to be closed. It saves you from cluttering up Workbench and can be useful when you are browsing down a directory tree because it can also close parent drawers as you go down.



EASY HTML

Probably the second biggest program on this disk, this is a full interface to help you generate your own WWW pages without having to learn all the HTML tags. It isn't *WYSIWYG* but it does make it easier to generate the tags for text, pictures and links. It's quite an intuitive program, so play around with it.

Create your own WWW pages with this HTML editor that can deal with all the tags for you. All you need to know is how to type.



Create disk labels for your disks in seconds using this program that scans the disks for you.

ETIKETTI

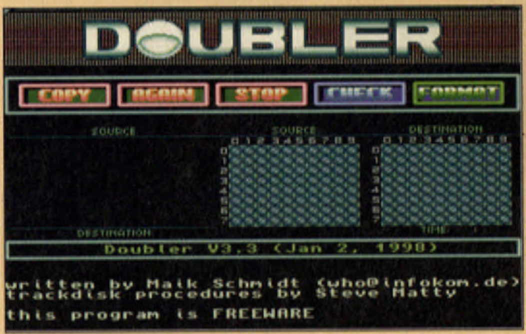
This program can automatically scan floppy disks and design a label for them for you to print out. It allows you to adjust names so they don't have to be exactly what the files are called but are whatever you may need so you know what is on the disk.

GLOBAL TRASH

This is a new version of the *Trashcan* program we included a few months ago with masses of new options.

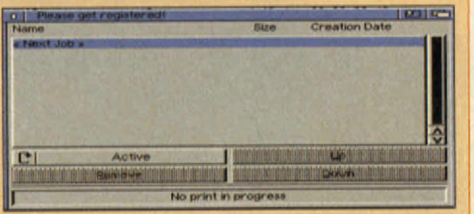
IFX

This allows you to add sound effects to your system operations like loading programs, closing windows, etc. There is a Prefs program that allows you to choose the sounds and operations.



Copying a floppy is a piece of cake with this easy program.

This new Print Manager can make it easier to get the most from your printer. The registered version you can buy offers faster printing too.



creates a new *Selector* script, which will change if the contents of the directory change because the *Selector* script is created every time the AmigaDOS script is executed. The AmigaDOS script creates a line in a *Selector* script for each program, inserting the button command in for *Selector* so when you click on the "Choose..." button in the *Selector* run script it has a button for each program. There is also the code in each line to run the corresponding program.

When you click on a button the program is run. You may not want to use WBStartup programs for this exercise as they are specifically designed to run from Workbench and we are forcing them to run from Shell, but you could use part of this script for other things.

Use the part that lists the programs for *Selector* buttons and choose a folder containing your Utilities or Tools:

```
list >ram:which.sel dh1:tools pat
~(#?.info) files lformat "button
*"%n*" dh1:tools/%n" selector
ram:which.sel delete
ram:which.sel
```

Now enter the command line `execute s:programs.dos` (or whatever you called the script) into your *ToolsDaemon*-type program. You now have a line that launches the DOS script to scan the Tools directory and then launches *Selector* to display whatever programs there are and the buttons for them. If you add or remove programs from that folder, you don't need to change the script as it will do it for you.

There are many more commands that *Selector* uses and you can do an amazing amount of interesting and varied things with it. For example, if you write your own *Selector* scripts rather than having them written on the fly, you can vary colours, headings, button types, use input and more. All the author asks is that you let him know you are using it and send him something. His address is in the documents with a list of all the commands and their uses, a beginner's tutorial and some sample files.

Games disk

AMIGA FORMAT





Yes, it's happy families on the games disk this month as not one but three games cosy up together. David Taylor knocks on the door to see who's coming out to play.

Kangy

This demo of a new platform game could easily make you lose an afternoon or two when you've got work to do. I speak from experience.



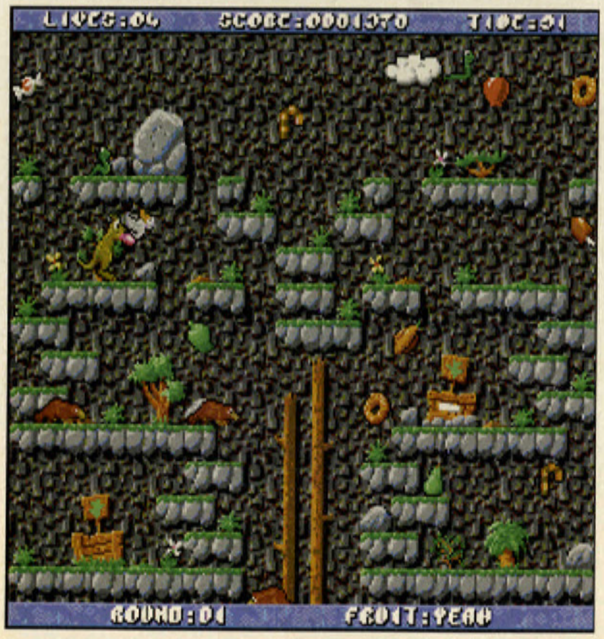
While platform gods may be able to master the positioning and jumping by tomorrow, the rest of us will still be ripping our joysticks from left to right on level two. You see, there are two amazing things about *Kangy*. The first is how easy it looks. The second is how difficult it is. You take control of our hopping hero using your joystick to control him. Left and right make him take small jumps. You can make longer, higher jumps in either direction by using diagonal up left and right.

> "...there are two amazing things about Kangy. The first is how easy it looks. The second is how difficult it is."

The game is a platformer and some of the platforms are quite small, but you can turn around on any of them by knocking the joystick in the opposite direction to the one you are facing. There are different difficulty settings you can choose before you start the game, and if you don't want to use the joystick there are keyboard controls.

You have only one weapon and that's your boxing gloves. You have to be quite forward thinking about how you use them or you could find yourself trapped. You can only hit straight in front of you at chest level.

This is fine for the bird which keeps flying at you trying to knock you off, but it's no use against the creatures that walk along the floor. They will simply walk along until they reach the end of a platform. They then jump off onto the next platform below and follow on their path. The creatures appear from the top of the screen and the pointing arrows show where the next creature is due. Because you cannot hit these beasties on the floor, you need to either avoid them completely or stand on the platform below them in such a way that you can punch them off the platform above. Do not try to jump up past a creature as you cannot jump through them if they are on a different level and they will still kill you.



The only way to get some respite from the bird's harrassment is to give it a good smack in the head with your boxing gloves.

If you do get trapped on a level with a creature, you can jump over it using the diagonal jump, but again watch out for creatures above you. A word about the bird – this little (muttered swearing) is a nightmare. It continues to appear and you have to watch out for it. It's all too easy to end up concentrating on finishing the level and miss its reappearance.



Still stuck on level one. It's a lot trickier than it looks, honest.

The bird flies diagonally across the screen until it reaches your level and then flies straight at you. You can feign and dodge past it but when it reaches one side of the screen it will turn around and come back for you. The only way to get a temporary respite is to punch it. You also need to watch out for the snakes and other animals that appear on the later levels.

They are different to the other creatures as they don't just walk to the end of the platform and then fall off, they just turn around and wriggle back. At some point they will decide to jump down a level. You get a warning that they are about to do this because they will stop in the middle of a platform and bunch up, ready to jump. On later levels you will need to watch out for other items that fall down the screen like water drops.

To complete a level you need to collect all the fruit that is strewn around. When you pick up a piece it will be stored in your pouch. You then need to drop the fruit in one of the boxes that are on the screen. Do this by going to one and pulling down on the joystick. You can only have one item of fruit in your pouch at once and when all but one piece of fruit has been collected, a special present will appear somewhere on the level. It won't stay

Super Tron 97

This is a new version of the old favourite. The basics of the game are that you control a light beam that moves constantly in straight lines leaving a trail behind it. The aim is to box the other players in so they have to either crash into a trail or turn back on their own line. Either will kill them. You can't pass through your own trail or anyone else's.

This version allows up to four players to play together and they can be a combination of human and computer opponents. To choose the options, use the arrow keys on the keyboard and Return. In the options, you can change the opponents, controls and the speed of players. Be warned that the computer is very good at this game, so the only advantage you can give yourself is speed.

Slow them down and speed yourself up so you have a better chance of boxing them in. You can also change the options for the play area to include walls and teleports. These make it harder for you to use the area as you can't go in a straight line for quite as long.

KEYBOARD CONTROLS

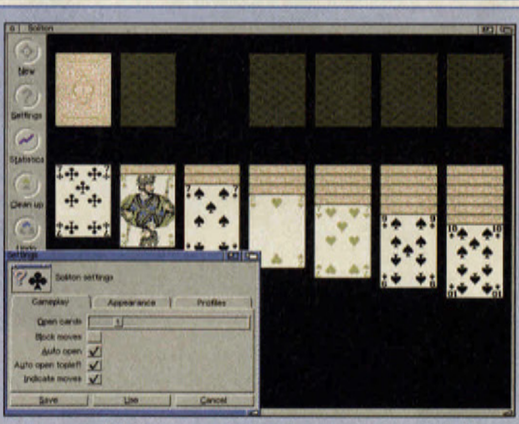
You can use these or change to joystick, but this must be selected on the Options screen: **Player One: Arrow keys. Player Two: A (left), S (right), D (up) and X (down).**



It may not look like much, but *Super Tron 97* will provide hours of extremely addictive gameplay for up to four players.

SOLITON

This is a simple card game of *Patience* that uses MUI and requires a high resolution screen setting. It is identical to the real card game in that you simply need to place a card of the opposite colour and the next number down on top of one of the cards that is shown. These cards can be taken from the pile at the top that are face down or from the playing area itself. When you move a card from the playing area, the one beneath will be uncovered. The idea is to get all the cards "out" by placing them in suit and number order in the four card spaces in the top right. You can change the settings so that one to three cards are turned over when you click on the pile of cards in the top left. It's a simple game, but it's easy to spend hours playing it.



This game of *Solitaire* uses MUI and comes with a default card set, though others can be drawn and used.

there forever, but if you can get to it and collect it in time you will either get a large score bonus (2,000-5,000 points) or an extra life. If you get killed on a level when you have fruit in your pouch, you won't lose it – just drop it in a box on your next life. When you've collected all the fruit on a level and placed it in the boxes, you've completed the level.

There are also a lot of bonus sweets around. You can collect these for extra points, but don't need to collect them all to finish a level.

When you move to the next level you'll be given a password so that you can go directly to that level the next time you play. The password is entered when you start a game. If you haven't collected any passwords and want to start at the first level, just leave the password blank and press return.

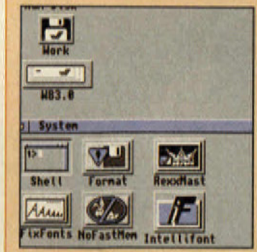
When you reach 20,000 points you'll get an extra life. You will need to have the coverdisk write-enabled to enter your name into the high score table.

While you can jump down two platform heights at once, you can't do any more or you'll die. Your enemies don't have this restriction.

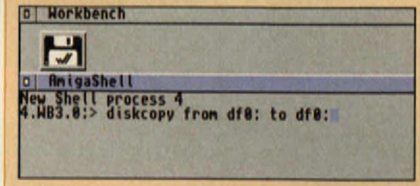
This demo contains the first eight rounds, but the complete game has forty. You can get it for only 25,000 Italian Lire from the author, Luca Carminati, at Via Fratelli Urbani, 1, 24016 San Pellegrino Terme (BG), Italy. Email toffi@spm.it

BACKING UP YOUR COVERDISK

Copying your Coverdisk is really very simple. Just follow the stages below...

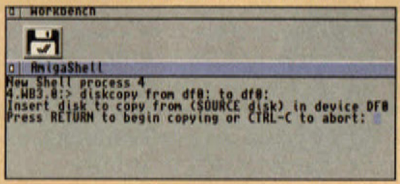


1 Boot up with your Workbench disk and find the Shell icon, in your system drawer. Double-click on this to go into the Shell.

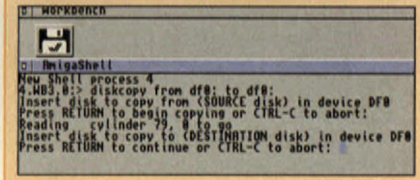


2 Type in the following line (with a zero, not the letter O), taking care to put the spaces in the correct places:

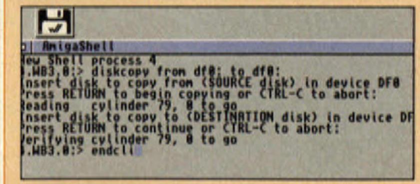
DISKCOPY FROM DF0: TO DF0:



3 When asked for the Source disk, insert your write-protected Coverdisk and press Return. All of the info on this disk will then be copied from the disk into memory.



4 Once your Amiga has read the info, it will ask for the Destination disk. Insert it and press Return. All information on this disk will be destroyed.



5 On an unexpanded machine, the Amiga may ask for the source disk again, because it copies in chunks. Finally, type endcli to close down the Shell.

DISK NOT WORKING?

We take every care to test the Coverdisk software, but Future Publishing cannot accept any responsibility for any damage occurring during its use. If your disk is faulty, send it back, with 2x26p stamps and an SAE to:

***Amiga Format* (insert name of disk)**
TIB PLC • TIB House
11 Edward Street
Bradford • BD4 7BH

If there is a manufacturing error then the stamps will be returned with a replacement disk.

Coverdisk

AMIGA FORMAT



Welcome to the ***24th Amiga Format*** CD-ROM. As ever, we have the freshest software for you, all presented by your host, Ben Vost.

It's been a very busy month. Not only did we get the news that *Quake* was to be released, but also the source code for *Doom* and Netscape Navigator 5! While we can't put the *Doom* source on our CD, you can expect to see the Navigator source in the next couple of months, to save you from having to download the whole thing.

There have been a few changes to our CD this month. The most important one is that Ben Speaks is now an HTML document. If you have your own web browser, now is the perfect time to use AFCDPrefs to make sure it points at the one on your hard drive instead of the demo on our CD. Even if you haven't, it's still worth your while moving the demo of whichever browser you prefer onto your hard drive to avoid all those "Volume AFCD24 is write protected" messages you get because the demos are trying to write to a cache.

Having an HTML Ben Speaks is good in several ways. The first is that it's prettier, giving us the ability to spice up my text with pertinent pictures. The second is that it leads nicely into the websites we have on the CD, making it easier for you to get at them. Hopefully, the few of you who aren't reading the Submissions Advice file on the CD will also find it more easily now too.

Another of the changes this month is the fact that we're trying to move away from forcing you to double click on the +AFCD_Setup+ icon every time you use

DOOM

The big news this month on the games scene has to be the free availability of id Software's *Doom* source code. The source was posted up by id on the 26th December and by the New Year there were already several ports made for the Amiga platform. We've included a number of *Dooms*, together with WAD files, in our In the Mag directory. You'll also find some websites devoted to the Amiga *Doom* phenomenon on our web pages (get to them through Ben Speaks). There's a feature on *Doom* in the mag itself, so I won't duplicate Nick's efforts here, but suffice to say that the versions we have on the CD should all work well enough, and that we'll have newer ones next month. Nick and I currently favour *ADoom* over the others, especially since it includes music and seems to be compatible with almost any graphics card we throw at it, but *DoomAttack* is apparently the fastest on an '030 processor. Go to Electronics Boutique and get yourself a copy of *Doom Trilogy* on CD and you'll have the full thing, ready to roll on your Amiga. Just what you need while you're waiting for *Quake* to turn up.





Arrgh! Bang! Whoosh! Gurgle! You get the whole range of sound effects when you play *Doom*.

READER WARRANT

When you're sending in your submissions make sure you give us an address where you can be contacted.

The address to send your stuff to is:
CD Submissions • *Amiga Format*
30 Monmouth St. • Bath • BA1 2BW

Everything included on the *AF*CD must have a reader warrant with it. Just cut it out off this page, sign it and send it in to us with your submission. A final reminder: if you don't include this warrant we simply won't be able to put your stuff on the CD – and that means you won't be able to have it used by other readers.

In respect of all material which forms my CD Submission to Future Publishing's *Amiga Format*, I hereby warrant that:-

1. The material is original and does not infringe any other material or rights;
2. The material does not contain any material which is defamatory, obscene or indecent and is exempt from classification under the Video Recordings Act 1984;
3. That there are no legal claims against the material provided;
4. That I have full power and authority to provide this material to Future Publishing.

Signature: ______________________________

ReaderStuff



£50 AF Winner!

We have a bumper bag of goodies from you this month with two zips and a CD-R in the post. The choice for a reader prize is always hard, but never more so than this month, with games coming from Chris Haynes and Costas Pagomenakis, *AnimatED* from Marco Vigelius and Raymond Webb's *Wordworth* templates. But the winner has to be Mr. L. Woodbridge (what's your first name L?) for his excellent CDXL movie of how he fitted his A1200 into an Eyetech tower.

AFCD24_B1:-ReaderStuff-/Trevor_Taylor

Trevor Taylor has come up with some lovely *Lightwave* and *Real3D* models for you to use in the scenes he has supplied or for your own. His work, although unfinished, on the *Star Wars*-based space station is particularly good, and the the tape measure gives you a good indication of how hard Trevor has worked to get the textures right. As Trevor says, you'll almost certainly need to use *Lightwave v5* for the multiple layered textures for the objects because anything less won't cope with them.

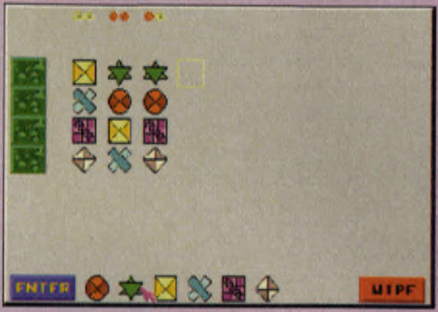


Trevor's modelling skills are shown off in his drawer in ReaderStuff and can also be found in the Gallery.

AFCD24_B1:-ReaderStuff-/P_T_Neill

Megamind is a *Mastermind* clone played with shapes rather than just colours and can be mind-bogglingly difficult because you can add more shapes to the answer, give a time limit for solving the problem or even reduce the number of chances you are given to solve it.

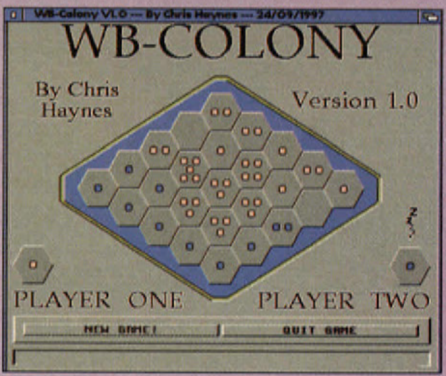
PT programmed this little beaut in AmosPro and it works nicely, although the different tones for the various shapes will swiftly get on your nerves, so turn down the volume.



So you think you have me fooled, eh Magnus? I'll work out the colours, just you wait!

AFCD24_B1:-ReaderStuff-/Chris_Haynes/WB-Colony

WBColony is one of those nice little WB games that you always think of just after you see them in action. It's basically a two-player game that consists of a map of hexagons into which you can place a "bean". Place beans equal to the number of hexagons surrounding your hex and the "beans" explode, putting themselves into the hexagons surrounding their starting point. The clever bit is the fact that this can cause a chain reaction with beans exploding all over the place! It's a lot tougher than you might think to beat your opponent, especially if they go for strategic chain reaction play. The only problem is the fact that it demands a screen with dimensions of 640x512 or bigger when it really doesn't need that much, putting it out of the reach of people who want to use their TV sets as displays. You should at least put in an option for a public screen, Chris.



Easy to play, but fiendishly tricky to win. Try to play against a four year old if you are having a problem.

our CD. We know it's a bit of a pain, even more so if all your system settings change, forcing you to use NewIcons or centring the titles in your windows. Try our disc without using +AFCD_Setup+ and see how you get on.

If you can't get any of the readmes or pictures to display, you should run AFCDPrefs just the once and save its settings so that AFCDView knows where to find all its components.

Anyway, on with the contents of the CD. This month we have a very full CD again, at over 640Mb, with more than 170Mb of your contributions.

READER REQUESTS

AFCD24:+Look_here_1st!+/Reader_Requests

Our Reader Requests facility is proving popular with readers, some of whom have a bizarre idea of exactly what we can put on our CD, like the bits needed to make a digital camera. However, this month we do have the latest Aminet Index that we can get (try it with the Index reader tool you'll find in AFCD24:-Seriously_Amiga-/Shareware/Misc/AminetIdx) and a whole bunch of CAD-type stuff for one particular reader.

LZX

AFCD24_B1:-Seriously_Amiga-/Shareware/Archivers/lzx121r1

Good old Jonathan Forbes. Although he's not working on *LZX* any longer, you couldn't use the registered features unless you managed to get in contact with him, which wasn't very easy. So, to save a lot of trouble, he has very generously decided to release the keyfile that allows full access to all features into the public domain. The directory doesn't contain any program icons, so

Continued ➡

At your fingertips

AMICDFS

AFCD24:-Seriously_Amiga-/Shareware/CD-ROM/AmiCDFS2

It's always best to keep up with the times and a new version of AmiCDFS, *Amiga Format*'s recommended Shareware CD filing system, is always worth a look. There haven't been that many changes since the last revision back in August, but this new version does feel faster. Martin Berndt, the author (who also wrote *MCX*, our favourite multi-function commodity), does give benchmark results for copying some files to RAM: from an Aminet CD, and AmiCDFS is demonstrably faster in this test than any of the other tested CDFSs.

SOLITON

AFCD24:-ScreenPlay-/Shareware/Soliton

If you like to mess with a Workbench game while you're downloading your email or the like, then *Soliton*, king of the *Patience* games, will be ideal for you. It's been a while since it was updated, but the author has now included the ability to simply double click on any card for it to move to where it should be – a very welcome addition for those trying to get a really high score (beat 1243! Hah!).

INDEXER

AFCD24_B1:-Seriously_Amiga-/Shareware/Misc/AminetIdx

If you download the Aminet Index on a regular basis, you'll know what a pain it can be to find what you want in it. This tool converts the INDEX file into more of a database so that it can be searched in a number of ways. The first time you load the index file it's pretty slow, but after that it's much quicker and comes in very handy for people who need to be able to find specific MODs or utilities.

VIRUSES

AFCD24_B1:-Seriously_Amiga-/Shareware/Virus/FastVirusKiller
AFCD24_B1:-Seriously_Amiga-/Shareware/Virus/VCBrain21
AFCD24_B1:-Seriously_Amiga-/Shareware/Virus/VirusZ
AFCD24_B1:-Seriously_Amiga-/Shareware/Virus/Virus_CheckerII
AFCD24_B1:-Seriously_Amiga-/Shareware/Virus/VTTest3

It's been a good month for virus checkers and a bad month for viruses, with new versions of *VTTest3, Virus Checker, VirusZ* and *Fast VirusKiller* to keep your machine safe from software suicide. Do make sure you're running at least one of these every time you put disks in your machine whose origins you are unsure of – unlike our CDs, of course.

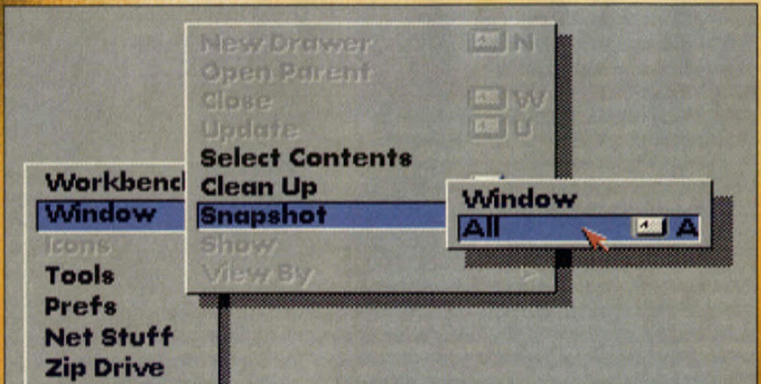
We've never had a virus on our discs mainly because our compiler runs three virus checkers on the machine he uses to compile the disc, and then it goes to the National Virus Laboratory (yes, there is one) for a final check before it finally comes out to you.

← you'll have to "Show All Files" or use a directory tool to copy *LZX* to your C: directory and the keyfile to your L: directory, but that will give you the ability to use -9 compression and more!

SPOTLIGHT ON A HANDY TOOL!

AFCD24:+Look_here_1st!+/Handy_Tools/MagicMenu

Have you ever dreaded the thought of having to go all the way to the top of your screen in order to get to the menus? While this may not apply to all those of you still using PAL: HiRes (640 x 256), those with graphics cards or higher resolution Workbenches will know exactly what I mean. You end up getting yourself a higher resolution mouse, which is nice, but what you really need is a way to open the menus at any point on the screen. Enter *Magic Menu*. Written by Olaf Barthel and Mario Cattaneo, it's a very handy commodity that gives you full control over your menus, not only for Workbench, but for any program you run. There are a couple of problems with programs that don't follow Intuition guidelines for menu operation (such as *Final Writer*), but even this is not a problem for the all-powerful *Magic Menu* – you can simply hold down the Ctrl key while you access the menus to get them to revert to normal Workbench operation.



Snapshotting becomes simple with *Magic Menu*.

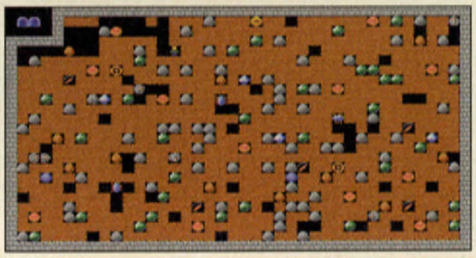
DIAMOND CAVES II

AFCD24_B1:-ScreenPlay-/Shareware/DiamondCaves2

Although all these "corridor" games are nice, the gameplay isn't always top notch. Remember back to those old, old games like *BoulderDash* on the C64?

You had to really think about what you were doing, you needed dazzling reflexes to be able to move fast enough when you had to and there seemed to be endless levels to conquer.

Diamond Caves II is one man's vision of a version of *Boulderdash* for the Amiga. It's extremely system friendly and it can record your games so you can play them back or send them to other *DCII* players. You can play it on your own or co-operatively and it even has a level editor so you can create your own levels of mayhem.



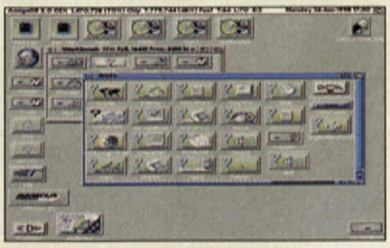
The graphics aren't great, the sound's terrible, but the gameplay's absolutely great as you try to work out how to get those diamonds.

UNIVERSAL AMIGA EMULATOR

AFCD24_B1:-In_the_Mag-/Emulation

As mentioned in Simon Goodwin's article this month, we have a pretty full complement of Amiga emulators for you in the drawer listed above, with emulators for almost all of the popular platforms out there.

Simon has also included emulators for handheld and 8-bit consoles that have been recently updated, like the bizarrely-named WzonkaLad and DarkNESs. Have fun!



Hah! It looks like a perfectly ordinary Workbench screengrab, but who's to say it isn't something from an Alpha box running UAE, eh?

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MARCH 1998

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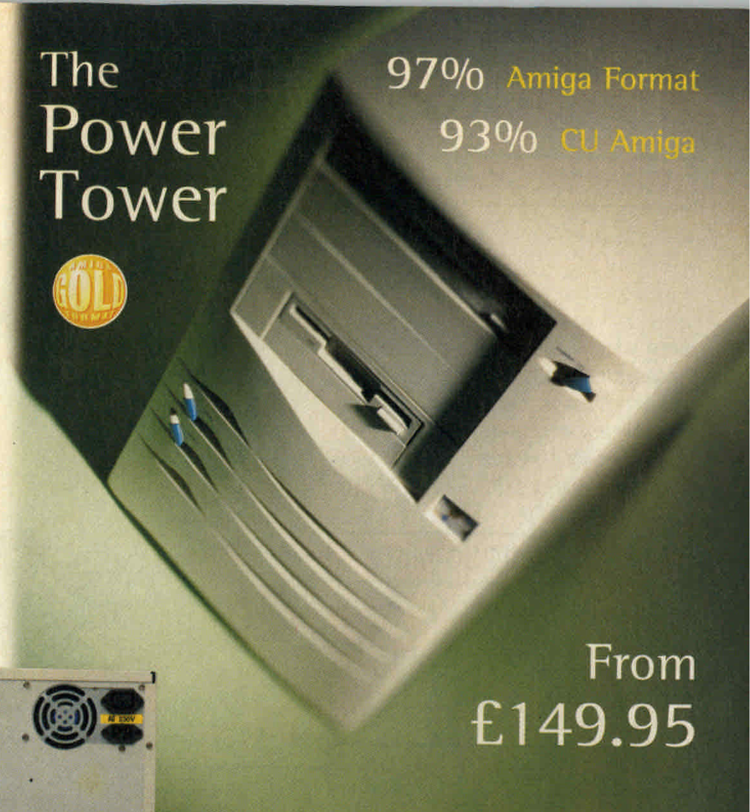
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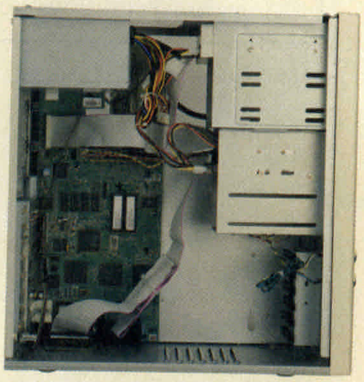
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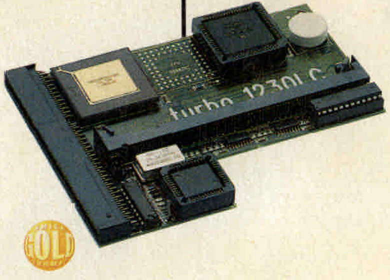
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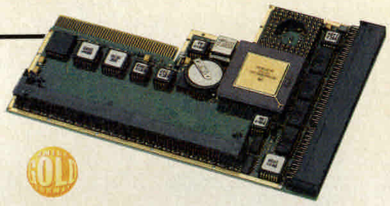
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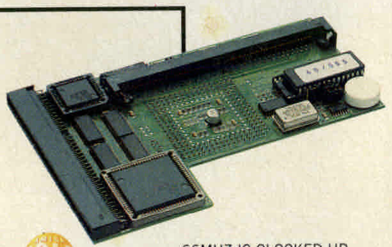
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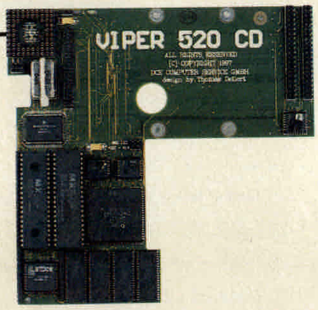
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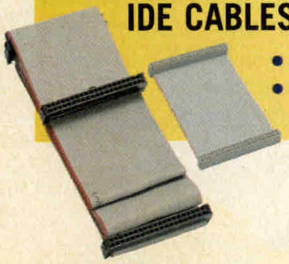
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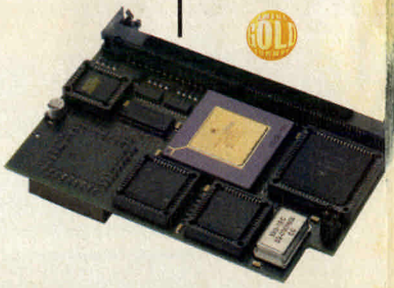
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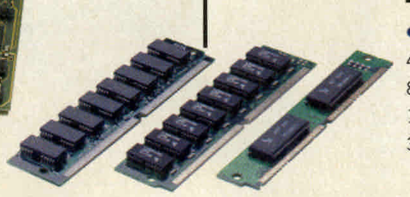
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